



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY GARRISON, HAWAII
DIRECTORATE OF PUBLIC WORKS
947 WRIGHT AVENUE, WHEELER ARMY AIRFIELD
SCHOFIELD BARRACKS, HAWAII 96857-5013

IMHW-PWE

Scott Glenn, Director
Office of Environmental Quality Control
Department of Health, State of Hawaii
235 S. Beretania Street, Room 702
Honolulu, Hawai'i 96813

Dear Mr. Glenn:

The U.S. Army Garrison, Hawaii (USAG-HI), Directorate of Public Works, Environmental Division has prepared an environmental assessment and draft finding of no significant impact (EA and draft FNSI) for the "Implementation of U.S. Army Garrison, Hawai'i and U.S. Army Garrison, Pōhakuloa Integrated Cultural Resources Management Plans." The project area is located on Army-managed land on the island of O'ahu and Hawai'i. Please publish the notice in the November 8, 2017 edition of the *Environmental Notice*.

Enclosed are a completed publication form and an electronic .pdf file of the EA and draft FNSI.

If there are any questions, please contact Dave Fluetsch at 808-656-5670 or Lisa Graham at 808-656-3075, both with the Environmental Division.

Sincerely,


for Rhonda L.S. Suzuki, PE
Environmental Division, Chief

Enclosures

**NON-CHAPTER 343 DOCUMENT
PUBLICATION FORM
OFFICE OF ENVIRONMENTAL QUALITY CONTROL**

Project Name: Environmental Assessment and Draft Finding of No Significant Impact for the Implementation of U.S. Army Garrison, Hawai'i and U.S. Army Garrison, Pōhakuloa Integrated Cultural Resources Management Plans

Applicable Law: National Environmental Policy Act

Type of Document: Integrated Cultural Resources Plans (ICRMPs), Environmental Assessment and Draft Finding of No Significant Impact (EA and Draft FNSI) – (Appendix C of each ICRMP)

Island: O'ahu and Hawai'i

District: Multiple Districts

TMK: Multiple TMKs / Districts

Permits Required: N/A

Proposing/Approving Agency:

United States Army Garrison, Hawai'i
Directorate of Public Works
Environmental Division (IMHW-PWE)
Schofield Barracks, HI 96857-5013
Contact: Lisa Graham, NEPA Program Manager, usaghi.pao.comrel@us.army.mil

Status: 30-Day Comment Period for this Draft FNSI runs from 8 November 2017 through 8 December 2017. Written comments should be emailed to usaghi.pao.comrel@us.army.mil or mailed to the Directorate of Public Works, U.S. Army Garrison, Hawai'i, Environmental Division (IMHW-PWE), 947 Wright Avenue, Wheeler Army Airfield, Schofield Barracks, Hawai'i 96857-5013.

Project Summary:

(Summarize proposed action and purpose/need in less than 200 words in the space below):

The U.S. Army Garrison, Hawai'i (USAG-HI) and U.S. Army Garrison, Pōhakuloa (USAG-Pōhakuloa) propose to implement Integrated Cultural Resources Management Plans (ICRMPs) that will enable USAG-HI and USAG-Pōhakuloa to support their training and readiness mission by managing cultural resources in accordance with Federal regulations and established practices of cultural resources management. The garrisons have prepared an Environmental Assessment (EA) that evaluates potential impacts of the ICRMPs. After reviewing the EA, the garrisons conclude that neither the Proposed Action nor the No Action Alternative result in any significant direct, indirect, or cumulative adverse impacts on the natural or human environment. This conclusion is documented in a Draft Finding of No Significant Impact (FNSI). An environmental impact statement will not be required.

After notice is published in the *Honolulu Star-Advertiser*, *West Hawaii Today*, and the *Hawaii Tribune Herald*, the public comment period runs 30 days (8 November – 8 December 2017). Copies of the

ICRMPs, EA and Draft FNSI are available for review at the Hawai'i State Library, Waialua Public Library, Mililani Public Library, Wahiawā Public Library, Hilo Public Library, Kailua-Kona Public Library, and Waimea Public Library. Copies may also be obtained online at <http://www.garrison.hawaii.army.mil/NEPA/NEPA.htm> or from Lisa Graham, NEPA Program Manager, at usaghi.pao.comrel@us.army.mil.

**Integrated Cultural Resources Management Plan
U.S. Army Garrison, Hawai'i
O'AHU ISLAND**

Draft

2017



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**U.S. Army Garrison, Hawai'i
Island of O'AHU
Integrated Cultural Resources Management Plan
2017**

Table of Contents

EXECUTIVE SUMMARY	vii
1. INTRODUCTION	1
1.1. ICRMP Purpose.....	1
Updating the ICRMP.....	1
1.2. Mission.....	1
<i>US Army Pacific (USARPAC)</i>	1
<i>Installation Management Command–Pacific (IMCOM-PAC)</i>	2
<i>Army Corps of Engineers, Pacific Ocean Division</i>	2
<i>Army Corps of Engineers, Honolulu District</i>	2
<i>U.S. Army Garrison – Hawai‘i (USAG-HI)</i>	3
<i>25th Infantry Division (25th ID)</i>	4
<i>U.S. Army, Hawaii (USARHAW)</i>	4
<i>Other Tenant Commands and Units</i>	5
1.3. Management and Responsibilities.....	5
<i>USAG-HI Garrison Commander</i>	5
<i>Directorate of Public Works</i>	6
<i>Environmental Division</i>	6
<i>Proponent for a Project, Action, or Undertaking</i>	8
1.4. Partnerships.....	10
<i>Advisory Council on Historic Preservation</i>	10
<i>National Park Service</i>	10
<i>Hawai‘i State Historic Preservation Division (SHPD)</i>	10
<i>Historic Hawai‘i Foundation</i>	11
<i>Hawai‘i State Office of Hawaiian Affairs (OHA)</i>	11
<i>Native Hawaiian Organizations</i>	11
<i>Island Palm Communities, LLC</i>	12
1.5. Statutes, Regulations, and Guidelines.....	13
<i>Federal Statutes</i>	13
<i>Executive Orders</i>	16
<i>Presidential Memoranda</i>	17
<i>Federal Regulations</i>	17
<i>Department of Defense Instructions and Guidance</i>	21
<i>U.S. Army Regulations and Guidance</i>	21
<i>USAG-HI Regulations and Guidance</i>	23
<i>Secretary of the Interior’s Standards and Guidelines</i>	24
<i>Advisory Council on Historic Preservation</i>	25
<i>State of Hawai‘i Statutes and Rules</i>	26
2. GEOGRAPHIC AND CULTURAL CONTEXT	27
2.1. Geographic Context.....	27
<i>Hawaiian Islands</i>	27
2.2. Cultural Context.....	28
<i>Traditional Hawaiian Context</i>	30

<i>Western Contact Context</i>	31
<i>Nineteenth Century Context</i>	33
<i>Military Context</i>	36
3. CULTURAL RESOURCES OVERVIEW	42
3.1. Categories of Cultural Resources at USAG-HI.....	42
<i>Historic property</i>	42
<i>Archaeological resource</i>	43
<i>Sacred site</i>	43
<i>Archaeological collections and associated records</i>	43
<i>Cultural Items</i>	43
<i>National Historic Landmark (NHL)</i>	43
<i>Historic Status Codes</i>	43
3.2. General Overview of Cultural Resources Inventory at USAG-HI.....	45
<i>Archaeological Sites</i>	45
<i>Sacred Sites</i>	45
<i>Historic Buildings, Structures, and Objects</i>	45
<i>Historic Districts</i>	46
<i>Curation Facility</i>	46
<i>Cultural Items</i>	47
<i>Informational challenges</i>	47
3.3. Cultural Resources Issues of Note at USAG-HI.....	49
<i>Inventory Information Improvement</i>	49
<i>Evaluation of Buildings and Archaeological Sites</i>	49
<i>Programmatic Agreements and Plans of Action</i>	49
<i>Native Hawaiian Consultation</i>	49
3.4. Cultural Resources Inventory by Sub-Installation.....	50
3.5. Mission Activities and Military Impacts to Cultural Resources.....	68
<i>Impacts to Historic Buildings, Structures, Districts, and Landmarks</i>	68
<i>Impacts to Archaeological Resources</i>	68
<i>Impacts to Sacred Sites</i>	69
<i>Impacts to Curated Archaeological Collections and associated records</i>	69
<i>Impacts to Cultural Items</i>	69
4. GOALS AND OBJECTIVES	70
4.1. Goals.....	70
4.2. Planning Objectives.....	70
4.3. 5-Year Project Planning.....	73
5. STANDARD OPERATING PROCEDURES	77
5.1. SOP 1: Compliance Procedures for NHPA Section 106.....	77
<i>Introduction</i>	77
<i>Implementing Authorities</i>	77
<i>Important Concepts</i>	77
<i>Standard Section 106 4-Step Process</i>	78
<i>Program Alternatives and Options</i>	78

<i>Participants in NHPA Section 106 Process</i>	78
<i>Section 106 Procedure</i>	80
<i>Coordinating the NEPA Process with NHPA Section 106 Regulations</i>	85
<i>Guidance for National Historic Landmarks</i>	85
<i>Guidance for consideration of places with religious and cultural significance for Native Hawaiian Organizations</i>	85
5.2. SOP 2: Identify and Evaluate Historic Properties	86
<i>Introduction</i>	86
<i>Implementing Regulations</i>	86
<i>Important Concepts</i>	86
<i>NRHP Criteria</i>	86
<i>Procedures</i>	87
5.3. SOP 3: Unanticipated Discovery of Historic Properties and Inadvertent Discovery of Human Remains and/or Cultural Items	88
<i>Introduction</i>	88
<i>Laws, Implementing Regulations, and Guidance</i>	88
<i>Important Concepts</i>	89
<i>ARPA and NAGPRA Statements for inclusion with Permits, Leases, and Contracts</i>	89
<i>Procedures</i>	90
5.4. SOP 4: Emergency Situations	93
<i>Introduction</i>	93
<i>Laws and Implementing Regulations</i>	93
<i>Important Concepts</i>	93
<i>Emergencies</i>	93
5.5. SOP 5: NAGPRA: Planned Activities and Comprehensive Agreements.....	95
<i>Introduction</i>	95
<i>Implementing Regulations</i>	95
<i>Important Concepts</i>	95
<i>Intentional Excavation</i>	95
<i>Treatment and Disposition: Native Hawaiian Human Remains</i>	96
<i>NAGPRA Plan of Action (POA) or Comprehensive Agreement (CA)</i>	96
<i>Dispute Resolution</i>	97
5.6. SOP 6: Archaeological Resources Protection Act of 1979 Compliance Process	98
<i>Introduction</i>	98
<i>Laws and Implementing Regulations</i>	98
<i>Important Concepts</i>	98
<i>ARPA Permit Procedures</i>	99
<i>Procedures for ARPA Violation (unpermitted excavations)</i>	99
5.7. SOP 7: Native Hawaiian Consultation	100
<i>Introduction</i>	100
<i>Laws, Implementing Regulations, and other guidance</i>	100
<i>Important Concepts</i>	100
<i>Confidentiality</i>	100
<i>Timing and Process</i>	100
5.8. SOP 8: Archaeological Collections Curation and Management	102
<i>Introduction</i>	102
<i>Laws, Implementing Regulations, Guidance, and policy</i>	102

<i>Important Concepts</i>	102
<i>Collections Curation and Management Procedures</i>	102
5.9. SOP 9: Maintenance Procedures for Historic Buildings and Structures	103
<i>Introduction</i>	103
<i>Laws, Implementing Regulations, and guidance</i>	103
<i>Important concepts</i>	103
<i>General Guidelines</i>	103
<i>Routine Maintenance Activities Not Requiring Further Section 106 Consultation</i>	104
6. IMPLEMENTING THE ICRMP	106
6.1. Cultural Resources Implementation Objectives	106
6.2. Reporting.....	108
6.3. Cooperative Agreements	108
6.4. NHPA Section 106 Agreements.....	109
6.5. Organizational Enhancement, Roles and Responsibilities	112
<i>Installation Integration</i>	112
<i>Command Support</i>	112
<i>Cultural Resources Management Organization</i>	112
<i>Public Involvement, Outreach, and Educational Materials</i>	114
6.6. Financial Management and Funding.....	116
7. REFERENCES	117
8. APPENDICES	132
8.1. APPENDIX A: List of Acronyms	132
8.2. APPENDIX B: USAG-HI DPW ENV Cultural Resources Material Remains and Associated Records Curation Standards.....	136
8.3 APPENDIX C: Draft FONSI and Final ENVIRONMENTAL ASSESSMENT.....	139
8.4. APPENDIX D: USAG-HI Cultural Resources Inventory	201

Table of Figures:

Table 1: USAG-HI Sub-Installations.....	3
Table 2: Historic Districts Summary Table	46
Table 3: Findings of Effect, Supporting Information, Completion of Process.....	83
 Figure 1: National NAGPRA Guidance for Inadvertent Discoveries on Federal Lands (https://www.nps.gov/nagpra/TRAINING/Intentional_Excavations.pdf)	92

EXECUTIVE SUMMARY

This Integrated Cultural Resources Management Plan (ICRMP) for United States Army Garrison, Hawai'i (USAG-HI) is a management plan to integrate the cultural resources management program with ongoing mission activities. The USAG-HI mission is "Supporting each Warrior, Family and Community with sustainable services, ensuring power projection readiness from Hawai'i" (U.S. Army Garrison, Hawaii 2016a).

The primary purpose of this ICRMP is to provide USAG-HI managers with a guide to ensure compliance with applicable cultural resources management laws and regulations, as they may apply at the twenty-two (22) sub-installations directly managed by USAG-HI. USAG-HI also has indirect oversight of United States Army Garrison, Pōhakuloa (USAG-Pōhakuloa), and with USAG-Pōhakuloa jointly manages cultural resources at Kilauea Military Camp (KMC) on the Island of Hawai'i. The ICRMP describes the fundamental requirements of cultural resources management, including identification and evaluation of cultural resources, consultation with concerned parties, consideration of impacts, and decisions about how to treat resources.

ICRMPs are established by Department of Defense Instruction (DoDI) 4715.16 as a Department of Defense (DoD) management plan. Army Regulation (AR) 200-1 *Environmental Protection and Enhancement*, is the implementing regulation for Army Cultural Resources programs. ICRMPs integrate the entirety of the installation's Cultural Resources Management program with ongoing mission activities, and identify compliance actions necessary to maintain the availability of mission essential properties and acreage.

AR 200-1 specifies Army policy for cultural resources management including the development of integrated cultural resources management plans for planning purposes. The Installation Management Command (IMCOM) directs and assists its installations with Cultural Resources Programs consistent with AR 200-1. The Garrison Commander has direct responsibility for establishing an installation's Cultural Resources Program and implementing a plan that successfully integrates cultural resources management within the process of achieving mission objectives.

The Cultural Resources Manager (CRM) plays a primary role in implementing the ICRMP. The CRM coordinates compliance with historic preservation laws and Army regulations on behalf of the Garrison Commander. The CRM coordinates with appropriate parties to ensure compliance with federal historic preservation laws, regulations and executive orders, with particular attention to the National Historic Preservation Act (NHPA), the Native American Grave Protection and Repatriation Act (NAGPRA), and the Archeological Resources Protection Act (ARPA), among others. The ICRMP integrates the management of cultural resources with other plans and processes and adopts goals to improve the program during the effective period of the plan.

The ICRMP contains a set of policies and procedures that enable USAG-HI to achieve and maintain compliance with various historic preservation management laws and regulations. The legal foundation included in this ICRMP provides guidance on carrying out the cultural resources management activities outlined in the Standard Operating Procedures. This document provides direction for routine activities that may have an impact on cultural resources, identifying various consultation requirements, and provides goals that would benefit the management of cultural resources at USAG-HI.

1. INTRODUCTION

1.1. ICRMP Purpose

There are over 40 separate statutes, regulations, or other binding guidance that set out multiple responsibilities of the U.S. Army Garrison, Hawai'i (USAG-HI) for cultural resources. The need for an Integrated Cultural Resource Management Plan (ICRMP) is established under Department of Defense Instruction (DoDI) 4715.16. Army Regulation (AR) 200-1 is the implementing regulation for Army Cultural Resources programs, including development of ICRMPs. ICRMPs integrate the entirety of the installation's Cultural Resources Management program with ongoing mission activities, and identify compliance actions necessary to maintain the availability of mission essential properties and areas. An ICRMP integrates the complex array of overlapping legal responsibilities into a coherent and efficient overall program. It integrates cultural resources responsibilities with the many other programs and activities that may interact with cultural resources and the people who care about them.

This ICRMP includes goals and priorities for effectively addressing the specific array of cultural resource management needs faced by USAG-HI. The ICRMP stands in support of the primary mission of USAG-HI and the military units stationed here or using the facilities. The practices and procedures outlined in the ICRMP minimize conflicts with the military missions supported by the Garrison.

The Cultural Resources Manager (CRM) is appointed by the Garrison Commander to provide day-to-day management of cultural resources, help ensure that all installation activities are in compliance with applicable cultural resource requirements, serves as a liaison between all persons involved in implementing the ICRMP, and implements the Standard Operating Procedures (SOPs).

Updating the ICRMP

The ICRMP serves as a long-term planning framework for the Cultural Resources Management Section and is updated annually. The ICRMP may require a major revision if the current ICRMP has been in effect for five or more years, or if there have been any major changes in the USAG-HI mission or cultural resources management activities. If the ICRMP has been in effect for five years and there are no major changes, then the current ICRMP may stay in effect until an annual review determines the need for major revision.

1.2. Mission

US Army Pacific (USARPAC)

The U.S. Army, Pacific (USARPAC) is the Army component of the U.S. Pacific Command (USPACOM) in an area of heightened importance. USARPAC "postures and prepares the force for unified land operations, responds to threats, sustains and protects the force, and builds military relationships that develop partner defense capacity in order to contribute to a stable and secure United States Pacific Command area of responsibility" (U.S. Army Pacific 2016). USARPAC is headquartered at Fort Shafter, Hawai'i in facilities managed by USAG-HI. The area of responsibility for USARPAC covers more than 100 million square miles and includes 2.5 billion people in 50 countries.

USARPAC is responsible for commanding, equipping, stationing, and training all assigned or attached units and for wartime and peacetime contingency planning for Army forces in Hawai'i, Alaska, Japan, and South Korea. USARPAC soldiers may find themselves deployed to any one of 42 self-governing nations, selected foreign territories, or 10 U.S. territories in the theater.

Other responsibilities include planning for mobilization, joint/combined exercises, security assistance, emergency evacuation of non-combatants, disaster relief, and civil disturbances. USARPAC also oversees, evaluates, and supports the Army National Guard in Hawai'i, Alaska, and Guam and has command and control of the Army Reserve units in Saipan, Guam, American Samoa, Hawai'i, and Alaska.

Installation Management Command–Pacific (IMCOM-PAC)

The Pacific Regional office of the Installation Management Command (IMCOM-PAC) is headquartered at Fort Shafter, Hawai'i in facilities managed by USAG-HI. IMCOM-PAC has oversight of garrisons in Alaska, Hawai'i, Japan, South Korea, and Kwajalein Atoll. The theater of operation for the U.S. Army Pacific Command is a large and complex area, which includes 43 countries, 20 territories and possessions, 10 U.S. territories, and five of the world's largest foreign armies (IMCOM-Pacific 2016). IMCOM-PAC assists with the development and implementation of conservation programs. IMCOM-PAC reports to IMCOM Headquarters in San Antonio, Texas.

The Installation Management Command (IMCOM) currently manages over 75 Army installations distributed over four regions. IMCOM-PAC is headquartered at Fort Shafter, Hawai'i, and is the direct reporting unit for the USAG-HI.

IMCOM-PAC provides oversight of a myriad of multi-million dollar base operation support programs. IMCOM-PAC operations include management of active and reserve component installations providing support for soldiers, family members, and retirees, as well as civilians.

IMCOM Regional Directors direct and assist their installations in the conduct of Cultural Resources Management Programs.

Army Corps of Engineers, Pacific Ocean Division

The U.S. Army Corps of Engineers, Pacific Ocean Division (CEPOD) has headquarters at Fort Shafter, Hawai'i. The Division is one of nine Corps regional offices providing vital public engineering services in peace and war to strengthen our Nation's security, energize the economy, and reduce risks from disasters. The Corps' Pacific Ocean Division is the engineering, design and construction agent for the Army in Hawai'i, for the Army and Air Force in Alaska, and for all Department of Defense agencies in Japan, the Republic of Korea, Kwajalein Atoll, and the Marshall Islands. CEPOD also executes multi-billion dollar construction programs for U.S. Forces in Japan and the Republic of Korea.

Army Corps of Engineers, Honolulu District

The U.S. Army Corps of Engineers, Honolulu District also has headquarters at Fort Shafer, Hawai'i. The Honolulu District, founded in 1905, has the largest area of geographic responsibility of any District in the Corps of Engineers. The Honolulu District's area of operations crosses five time zones, the international dateline, and approximately 12 million square miles of the Pacific Ocean. The District's area of responsibility includes the territories of Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. It also includes the Freely Associated States; the Republic of Palau, the Federated States of Micronesia, and the Republic of the Marshall Islands. The Honolulu District has seven primary missions: military construction, civil works, interagency and international services, real estate, regulatory, environmental services, and emergency management. The overall mission is to provide vital public engineering services in peace and war to strengthen our Nation's security, energize the economy, and reduce risks from disasters.

U.S. Army Garrison – Hawai‘i (USAG-HI)

“Supporting each Warrior, Family and Community with sustainable services, ensuring power projection readiness from Hawai‘i” is the mission of U.S. Army Garrison, Hawai‘i (U.S. Army Garrison, Hawaii 2016a).

USAG-HI manages all Army installations in Hawai‘i, providing installation management service and logistical support for approximately 93,700 Army and other military personnel, civilian personnel, military retirees and their dependents, and others. USAG-HI manages a total of 22 sub-installations on the islands of O‘ahu and Hawai‘i. Nineteen (19) of these are located on the island of O‘ahu, while the remaining three (3) are located on the Island of Hawai‘i. USAG-HI maintains oversight and support responsibilities for the subordinate, indirect garrison of USAG-Pōhakuloa on the island of Hawai‘i, and jointly with USAG-Pōhakuloa, facilitates cultural resources responsibilities of the Army at Kīlauea Military Camp. There is a separate ICRMP document for USAG-Pōhakuloa detailing the cultural resources management for those areas.

USAG-HI Sub-Installations addressed in this ICRMP

Sub-Installations On O‘ahu	Date Established	Date Acquired	Total Acres
Āliamanu Military Reservation (AMR)	1915	1915	589.4
Dillingham Military Reservation (DMR)	1942	1974	618.1
Field Station Kunia (FSK)	1943	1948	31.5
Fort DeRussy Military Reservation (FDR)	1902	1902	68.6
Fort Shafter Military Reservation (FSMR)	1899	1899	596.1
Helemano Military Reservation (HMR)	1943	1943	288.9
Kahuku Training Area (KTA)	1944	2004	9493.3
Kawailoa Training Area (KLOA)	1955	Leased	23539.4
Kīpapa Ammunition Storage Site (KAS)	1944	1944	374.4
Mākua Military Reservation (MMR)	1941	1943	4280.4
Mauna Kapu Communication Station Site (MKS)	1961	1965	16.14
Mokulē‘ia Army Beach (MAB)	1942	1974	26.4
Pililā‘au Army Recreation Center (PARC) within Waianae-Kai Military Reservation (WMR)	1918	1918	13.52
Pupukea-Pa‘ala‘a-Uka Military Road (Drum Road)	1935	1935	109.25
Schofield Barracks Military Reservation (SBMR)*	*	*	*
Signal Cable Trunking System	1937	1937	0.10
Tripler Army Medical Center (TAMC)	1944	1944	360.6
Waikakalaua Ammo Storage Tunnels (WAST)	1944	1946	176.1
Wheeler Army Airfield (WAAF)	1927	1927	1588.0
Sub-Installations On Hawai‘i	Date Established	Date Acquired	Total Acres
Kīlauea Military Camp (KMC)	1916	1920	72 ¹
*SBMR includes training areas and a cantonment:			
Schofield Barracks East Range, South Range, West Range	1909	1909	15033.56
Schofield Barracks Cantonment	1909	1909	2448.7

Table 1: USAG-HI Sub-Installations

¹ 72-acres is reported in the HQIS, but other Department of the Army datasets and NPS records report different acreages for KMC.

Many of the responsibilities of USAG-HI are comparable to the operation of a mid-size urban area, with purview over housing, roads, utilities, schools, libraries, recreational facilities and programs, safety and emergency responses, and other amenities that support basic life and work. The Garrison also directly supports operational and training requirements for military units and support services specific to the needs of military personnel, their families, and dependents. The Garrison plans and executes construction and maintenance of ranges for specific training actions.

While the Garrison is responsible for basic support and management services, there are many other military commands and units working from within the installation. The activities and requirements of these units affect the demands facing cultural resources management within the Garrison jurisdiction. The USAG-HI Garrison Commander reports to both the Pacific Region of the Installation Management Command (IMCOM-PAC) and to the Senior Military Commander of the United States Army, Hawai'i (USARHAW).

The USAG-HI actively supports the following tenant activities, organizations, and units. Tenants are required to notify the CRM of any potential changes to historic properties and to coordinate the Section 106 process through the USAG-HI Cultural Resources Section.

25th Infantry Division (25th ID)

The 25th ID is the principal land user at USAG-HI, and is the major organization deployed forward in the Pacific region. Its mission is to conduct Decisive Actions in support of Unified Land Operations. The division conducts continuous persistent engagement with regional partners to shape the environment and prevent conflict across the Pacific Operational Environment (25th Infantry Division 2016). Also known as the “Tropic Lightning” Division and “America’s Pacific Division,” the unit stands ready to provide mission-tailored force packages to support the full range of operational requirements within the Pacific. The 25th ID also conducts partnered exercises and expert exchanges with various countries throughout the region to build partner capacity and interoperability.

Commands within the 25th ID consist of:

- 25th Headquarters and Headquarters Battalion
- 2nd Infantry Brigade Combat Team
- 3rd Infantry Brigade Combat Team
- 25th Combat Aviation Brigade
- 25th Sustainment Brigade
- 25th Division Artillery

U.S. Army, Hawaii (USARHAW)

Headquarters, Department of the Army (HQDA) has assigned the Senior Commander of the 25th Infantry Division (25th ID) the responsibility of coordination and providing support and prioritization to all Army units in Hawaii. The Senior Commander and the Headquarters staff addressing these responsibilities are U.S. Army, Hawaii (USARHAW). The mission of USARHAW is "prioritizing, directing, and synchronizing installation-level resources to assist commanders to prepare their units for assigned missions."

Other Tenant Commands and Units

8th Theater Sustainment Command
311th Signal Command (Theater)
94th Army Air & Missile Defense Command
Pacific Regional Medical Command & Tripler Army Medical Center
9th Mission Support Command
18th Medical Command
19th Military Police Battalion
500th Military Intelligence Brigade
599th Transportation Brigade
196th Infantry Brigade
U.S. Army Reserves
State of Hawai'i Army National Guard

USAG-HI is not a Joint Installation; however, other organizations utilize some of USAG-HI's facilities and ranges. The **U.S. Air Force, U.S. Navy, U.S. Marine Corps, Department of Army Police, Hawai'i Police Department**, and other **local fire and law enforcement** agencies use firing ranges, drop zones, and training areas on a limited basis.

Allied Armed Forces - Allied units deploying to O'ahu for training match the size and mission tasks to similar 25th ID units.

1.3. Management and Responsibilities

DoD policy and Army regulations call for installations and activities to develop and implement an ICRMP for use as a planning tool. These plans help ensure compatibility between the installation's military mission, other planned activities, and the management of its cultural resources. According to AR 200-1, *Environmental Protection and Enhancement*, the major goal of a Cultural Resources Management program is to "develop and implement procedures to protect against encumbrances to mission by ensuring that Army installations effectively manage cultural resources" (Department of the Army 2007).

AR 200-1 and DoDI 4715.16 create a framework for managing cultural resources at the installation level and support the Army in addressing its need to have a comprehensive historic preservation program. Therefore, the effective management of cultural resources, as exemplified by the development and Garrison-wide acceptance of this ICRMP, follows from federal laws, Army regulations, and from Federal Standards and Guidelines for federal historic preservation programs.

USAG-HI Garrison Commander

The Garrison Commander (GC) ensures that the Garrison meets the general cultural resources requirements assigned. As the leading authority in charge of cultural resources, the GC is specifically designated as the federal agency official for purposes of the National Historic Preservation Act (36 CFR § 800), as the Federal Land Manager for purposes of the Archaeological Resources Protection Act (32 CFR § 229), as the Federal Agency Official with management authority over archeological collections and associated records (36 CFR § 79), and as the Federal Agency Official for purposes of the Native American Graves Protection and Repatriation Act (43 CFR § 10). AR 200-1 (1-24(i)) states that the Garrison Commander may not delegate signature authority on environmental agreements.

AR 200-1, Chapter 6, lists Garrison, wide tasks with respect to cultural resources. The lists from this regulation provide a succinct overview of the range of duties and requirements with respect to cultural resources management including, but not limited to, the following:

- Retain general oversight of cultural resources responsibilities.
- Assign operational responsibilities and monitor performance to assure that responsible parties appropriately and cooperatively carry out the tasks that fall within their spheres of authority and responsibility.
- Establish a process that requires installation staff elements, tenants, and other interested parties to coordinate with the CRM early in the planning of projects and activities to determine if any historic properties are, or may be, present that could be directly or indirectly affected by a project or activity. These elements include any training and testing activities, master planning, environmental impact analysis, or natural resources and endangered species management planning and programming.
- Establish and maintain appropriate consultative relationships with Native Hawaiian Organizations and other interested parties.
- Establish funding priorities and program funds for cultural resources compliance and management activities.

Directorate of Public Works

As head of the Directorate of Public Works, the Director of DPW is responsible on behalf of the Garrison Commander for proper compliance with Sections 106 of the NHPA throughout the processes of initial planning, scoping, design, and implementation of undertakings that fall under the auspices of DPW throughout the installation.

As part of the general oversight of Section 106 compliance, the Director will:

- Assure that the DPW personnel frequently assigned proponent responsibilities are familiar with the requirements of Section 106 and the processes for compliance with it.
- Assure that the various project planning and design processes within the Directorate properly coordinate with the CRM and maintain accurate project records regarding the status of Section 106 compliance status of projects.
- Assure that stipulations agreed upon in order to resolve Section 106 responsibilities are implemented in a timely manner in conjunction with the projects to which they apply.
- Review reports of compliance exceptions received from the Environmental Division Chief and take appropriate actions to resolve both immediate and systemic problems that may affect compliance.

Environmental Division

The USAG-HI DPW Environmental Division is comprised of two branches; the Compliance Branch and the Conservation Branch, who are dedicated to providing environmental guidance, support, and liaison services to those who live, work and train on the installation. The Environmental Division serves as the technical environmental liaison between the state and federal regulatory agencies, the Hawaiian communities, and special interest groups by providing guidance, training, and other support necessary for USAG-HI to sustain its mission while also protecting the environment. The Environmental Division oversees clean-ups of past contamination, management of current environmental hazards, pollution prevention, and conservation of cultural and natural resources (U.S. Army Garrison, Hawaii 2016b).

Conservation Branch

The Conservation Branch Chief is responsible for general oversight of the Cultural Resources program. The Conservation Branch Chief oversees participation in the review of undertakings for compliance with NHPA Section 106 and the appropriate general coordination between the NEPA program and NHPA Section 106 review.

Cultural Resources Section

The Cultural Resources Manager (CRM) is the lead position within the Cultural Resources Section, Conservation Branch, Environmental Division, DPW. The CRM program staff includes both Department of the Army Civilian employees and contracted support staff.

The general objectives of the cultural resources program are:

- To eliminate impacts to the military missions arising from cultural resources issues;
- To meet compliance requirements in conjunction with other Garrison offices; and
- To identify, enhance, and implement program efficiencies.

Major Cultural Resources Section Responsibilities

Inventory and Monitoring: Identify and document cultural resources, which also encompasses compiling and managing information about these resources. The Cultural Resources Section staff actively monitor historic property conditions to facilitate management.

Review of Projects/Undertakings/Actions for Compliance with Cultural Resources Requirements: The Cultural Resources Section maintains records of Garrison compliance with Section 106 of NHPA, NAGPRA, the archaeological permit standards of ARPA, and other cultural resources requirements for all actions or undertakings that have the potential to affect historic properties, archaeological resources, cultural items, or sacred sites. The Cultural Resources Section reviews proposed projects and actions beginning in early stages of planning to identify cultural resources issues and to inform the proponents regarding the requirements that may apply. The Cultural Resources Section advises proponents as to the most efficient and effective process through which the Garrison may achieve compliance with the cultural resources requirements applicable to specific undertakings.

Consultation and Public Participation: In many circumstances, consultations are required with Native Hawaiian Organizations, other agencies, and interested groups and individuals. DoDI 4710.03 directs the Garrison to maintain on-going consultative relationships with Native Hawaiian Organizations.

Information Management: The Cultural Resources Section must manage a complex set of interrelated information. Many of the records compiled by the Cultural Resources Section are permanent in nature and need appropriate long-term care.

Mitigation Implementation: The results of Section 106 or other compliance reviews often establish responsibilities to implement specific measures to avoid, minimize, or mitigate damage to cultural resources. The Cultural Resources Section implements many of these measures agreed to in consultation. Proponents and Project Managers may also be responsible for implementation of mitigation measures in coordination with the Cultural Resources Section.

Curation: Federal Regulation 36 CFR §79 establishes standards, procedures, and guidelines for preserving collections of prehistoric and historic material remains and associated records recovered under the authority of ARPA, NHPA, and other statutes so these collections may retain research and educational value indefinitely.

Research: Historical, cultural, and archaeological research all contribute to the documentation necessary for maintaining an accurate inventory record and for evaluating cultural resources significance.

Budgets, Work Plans, Project Funding Requests, and Contracts: The CRM develops budgets, annual work plans, and project funding requests for the Cultural Resources Section. The CRM develops and implements cooperative agreements and other contracts necessary to carry out the substantive tasks associated with cultural resources responsibilities of the Garrison. The U.S. Army Corps of Engineers Honolulu District or other agencies administer many contracts for cultural resources tasks on behalf of project proponents or on behalf of the Cultural Resources Section. These contracts often include archaeological survey, site documentation, monitoring, historic structure reports, building rehabilitation, or other tasks.

Internal Program Assessments: The Environmental Performance Assessment and Assistance System (EPAAS) maintains an extensive checklist of cultural resources requirements applicable to federal agencies in general, and another list addressing Department of the Army policies and direction with respect to those requirements. The CRM conducts an internal program assessment using these checklists and reports results through the Environmental Management System (EMS). Any findings of requirements not well addressed should result in a corrective action plan.

Track and Report Program Metrics for Data Calls: The Department of the Army and IMCOM periodically request a variety of data pertinent to cultural resources at Army Garrisons. The CRM compiles the data and drafts responses using the measures specified in the requests. Data calls from IMCOM or Department of the Army normally combine the data from USAG-HI and USAG-Pōhakuloa for reporting purposes.

Proponent for a Project, Action, or Undertaking

AR 200-1 defines “proponent” generally as “the unit, element, or organization that is responsible for initiating and/or carrying out the proposed action.” Those units or organizations that frequently plan and implement projects for construction, development, and maintenance on USAG-HI are usually proponents of those projects for purposes of complying with NHPA Section 106. Proponent organizations include but are not limited to:

- USARHAW Integrated Training Area Management (ITAM)
- USARHAW Training Support Systems
- USAG-HI DPW Master Planning Branch
- USAG-HI DPW Utilities
- USAG-HI DPW Job Order Contract managers
- USAG-HI Directorate of Plans, Training, Mobilization & Security (DPTMS)
- USAG-HI DPW Engineering Division
- USAG-HI Troop Construction project managers
- Managers of other contracted work
- U.S. Army Corps of Engineers
- Military units

Proponents must be *active* agents in the consideration of cultural resources pertinent to their projects in order for the Garrison to achieve compliance. Proponents must be prepared to justly consider altering project plans and parameters responsive to comments and concerns raised during consultations. Project managers implementing a project must be prepared to enforce the terms of agreements reached for cultural resources protection during the planning process. Proponents cannot rely on the Cultural Resources Section to achieve compliance on their behalf without the active collaboration with the proponent throughout the project planning. Whichever office or individual assumes proponent

responsibilities for a project, action, or undertaking, typically has the following responsibilities as noted in AR 200-1, implementing regulations for NHPA (36 CFR §800), and Army regulations for implementing National Environmental Policy Act (NEPA) (32 CFR §651.4):

- Notice to the CRM of a proposed action or undertaking and its full known scope **early in planning processes.**
- Participate in defining the Area of Potential Effects for the undertaking.
- Assure that funding and support for identification of historic properties, assessments of effect, and implementation of mitigation measures are incorporated into project proposals and budgets.
- Supply information needed by the CRM for official correspondence and consultations.
- Assure that NEPA and NHPA compliance are properly coordinated.
- Incorporate any restrictions or agreement stipulations resolving cultural resources issues into project designs, contracts, construction inspections, standard operating procedures, and other project oversight.
- Keep written record of Section 106 completion and any resulting conditions or agreements applicable to the project.
- Notify CRM of any material change to the project scale, scope, design parameters, timing, or other circumstances to assess whether the changes affect the Section 106 compliance status at any stage of project planning or implementation.
- Notify the CRM and the DPW when the implementation of the project appears not to be in accord with or lacking any of the provisions upon which the Section 106 resolution is contingent.

1.4. Partnerships

USAG-HI and USAG-Pōhakuloa maintain partnerships with outside agencies concerned with cultural resources management. Outside agencies are those organizations, stakeholders, or interested parties that are directly involved with cultural resource management on Army landholdings. As stated in DoDI 4715.16, “Consult in good faith with internal and external stakeholders and promote partnerships to manage and maintain cultural resources by developing and fostering positive partnerships with Federal, tribal, State, and local government agencies; professional and advocacy organizations; and the general public”(Department of Defense 2008). USAG-HI Cultural Resources Section consults with the following organizations:

Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation (ACHP) is an independent Federal agency created by the NHPA, and is the major policy advisor to the Government in the field of historic preservation. The ACHP is composed of nineteen Members. A small professional staff serves it with offices in Washington, DC. The Advisory Council may choose to participate in the development of agreement documents. Disputes regarding a federal agency’s completion of Section 106 responsibilities may also be referred to the Advisory Council.

National Park Service

The National Park Service (NPS) participates in cultural resources management at both the national and local levels. The Western Regional Office (WRO) of the NPS has oversight of historic preservation offices in the western continental United States and the Pacific; in this latter role WRO has been reviewing agreement documents signed by the State Historic Preservation Division (SHPD). WRO also participates in Section 106 consultations for undertakings that may affect National Historic Landmarks (NHLs). In accordance with 36 CFR §800.10, USAG-HI notifies the Secretary of the Interior and NPS when considering undertakings with potential to affect National Historic Landmarks adversely. There are currently two National Historic Landmark districts under USAG-HI jurisdiction: Palm Circle at Fort Shafter and Wheeler Field at Wheeler Army Airfield. The NPS also oversees The Secretary of the Interior’s Standards for the Treatment of Historic Properties.

Hawai’i Volcanos National Park (HAVO) owns the land on which Kilauea Military Camp (KMC) on Hawai’i Island is situated and, therefore, has some ongoing responsibility for the management and care of cultural resources on that installation. The HAVO Superintendent has approval authority over major undertakings that may have an effect on cultural resources. A cultural resource specialist with the National Park Service provides professional expertise and is the point-of-contact for the CRMs at USAG-HI and USAG-Pōhakuloa.

Hawai’i State Historic Preservation Division (SHPD)

The State Historic Preservation Office (SHPO) was established under the National Historic Preservation Act of 1966 (NHPA). Federal agencies are required to consult with the SHPO and obtain concurrence on determinations of eligibility and effect. The Chairperson for the Hawai’i State Department of Land and Natural Resources (DLNR) is officially designated as the State Historic Preservation Officer for purposes of NHPA. The Administrator for the State Historic Preservation Division (SHPD) within DLNR serves as the Deputy SHPO and directs a professional and technical staff that carries out the regular duties on behalf of the SHPO.

Historic Hawai'i Foundation

The Historic Hawai'i Foundation was founded in 1974 to preserve Hawai'i's unique architectural and cultural heritage. The organization is an interested party in cultural resource management issues on USAG-HI lands, especially with respect to historic buildings and districts.

Hawai'i State Office of Hawaiian Affairs (OHA)

The Office of Hawaiian Affairs (OHA) is an agency of the State of Hawai'i, specifically formed to ensure the perpetuation of the culture, the enhancement of lifestyle, and protection of entitlements of Native Hawaiians. OHA functions operationally as a State government agency with a strong degree of autonomy and as a trust. As a part of its mission, OHA participates in consultations regarding cultural resources that hold cultural or religious significance to Native Hawaiians. OHA is a source of expertise and advice regarding values and significance that may be embodied in specific cultural resources, and regarding the other Native Hawaiian organizations and individuals that may wish to participate in specific consultations. Federal laws and regulations requiring federal agencies to consult with Native Hawaiian Organizations specifically designate OHA as one of the organizations that must be included in such consultations.

Native Hawaiian Organizations

O'ahu Island Burial Council (OIBC)

The State of Hawai'i established a burial council for each of the major Hawaiian Islands (Hawai'i Revised Statute (HRS) 6E-43.5). These councils have oversight within State of Hawai'i law and regulations to assure that Native Hawaiian burials affected by projects, receive appropriate respect, proper handling and treatment, and proper final disposition. The five Island Burial Councils are supported administratively through the State Historic Preservation Division. Council members are appointed by the Governor and confirmed by the Senate for a four year term.

USAG-HI includes OIBC in consultations regarding burials, as a source of expertise and advice regarding appropriate values and sensitivities related to burials, and for help seeking potential claimants or cultural descendants affiliated with specific burials. Council members meet once a month to address concerns related to Native Hawaiian burial site issues for O'ahu Island and often participate in consultations where burials are known or likely to occur within the area of potential effect for a proposed undertaking or project under Garrison jurisdiction.

Other Native Hawaiian Organizations

There are a large number of Native Hawaiian Organizations (NHOs) and groups throughout the Hawaiian Islands that serve and represent the interests of Native Hawaiians for a variety of purposes. The Department of Interior maintains a Native Hawaiian Organizations Notification List website for Federal and State agencies seeking to comply with consultation requirements pursuant to Federal law. The list is updated periodically and available at <https://www.doi.gov/hawaiian/NHOL>.

DoDI 4710.03 provides formal policy guidance with respect to consultations with NHOs. It acknowledges the special status of Native Hawaiian Organizations in Federal laws, states a DoD wide policy of meaningful consultations, and directs that on-going consultative relationships be maintained with Native Hawaiian Organizations.

Island Palm Communities, LLC

Island Palm Communities is a limited liability corporation (LLC) that manages Army Family Housing within the USAG-HI jurisdiction. Island Palm, LLC has a ground lease providing for use of specific areas within USAG-HI for family housing, and owns buildings provided for use of family housing. A number of the family housing units managed by Island Palm, LLC are historic houses, including residences in Palm Circle National Historic Landmark District and other historic districts at Wheeler Army Air Field and Schofield Barracks. The historic properties are still within the jurisdiction of USAG-HI and the terms of the ground lease require Island Palm, LLC to provide on-going maintenance and care consistent with the standards and guidelines issued by the Secretary of the Interior.

1.5. Statutes, Regulations, and Guidelines

Statutes, regulations, and guidelines pertaining to the management of cultural resources under U.S. Army Garrison, Hawai'i (USAG-HI) stewardship.

Federal Statutes

Name	Citation	Common Abbreviation
Abandoned Shipwreck Act of 1987	43 U.S.C. § 2101-2106	
American Indian Religious Freedom Act of 1978, as amended	42 U.S.C. § 1996-1996a	AIRFA
Americans with Disabilities Act of 1990	42 U.S.C. § 12101	ADA
Antiquities Act of 1906, as amended	54 U.S.C. § 320301-320303	
Archaeological and Historic Preservation Act of 1974, as amended	54 U.S.C. § 312501-312508	AHPA
Archaeological Resources Protection Act of 1979	16 U.S.C. § 470aa-470mm	ARPA
Coastal Zone Management Act of 1972	16 U.S.C. § 1451-1456	CZMA
Historic Sites Act of 1935, as amended	54 U.S.C. § 320101-320106, 102303, 102304, 309101	HSA
National Environmental Policy Act, as amended	42 U.S.C. § 4321-4370c	NEPA
National Historic Preservation Act of 1966, as amended	54 U.S.C. § 300101 et seq.	NHPA
Native American Graves Protection and Repatriation Act of 1990	25 U.S.C. § 3001-3013	NAGPRA
Public Buildings Cooperative Use Act	40 U.S.C. § 3306	PBCUA
Religious Freedom Restoration Act	42 U.S.C. § 2000bb	RFRA

Abandoned Shipwreck Act of 1987 (43 U.S.C. § 2101-2106)

The Abandoned Shipwreck Act establishes ownership and preservation responsibilities for abandoned shipwrecks in the waters of the United States.

American Indian Religious Freedom Act, as amended (42 U.S.C. § 1996-1996a)

The American Indian Religious Freedom Act (AIRFA) states that it is the policy of the United States to “protect and preserve for American Indians their inherent right of freedom to exercise the traditional religions of the American Indians, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonial and traditional rites.” AIRFA promotes consultation and guarantees access to traditional sites located on federal lands and a non-interference with religious practices.

Americans with Disabilities Act of 1990 (42 U.S.C. § 12101)

The Americans with Disabilities Act (ADA) is a wide-ranging legislation intended to establish a clear and comprehensive prohibition of discrimination on the basis of disability. It establishes standards for accessibility for public buildings in regard to entryways, restrooms, and other issues. Accessibility to properties open to the public, including historic properties, is a civil right.

Antiquities Act of 1906 (54 U.S.C. § 320301-320303)

The Antiquities Act authorizes the President to designate historic and natural resources located on federally owned or controlled land as National Monuments and provides protection for archaeological resources. The act provides protection to prehistoric and historic ruins and objects by providing criminal sanctions against excavation, injury, or destruction of those resources without the use of a federal permit.

Archaeological and Historic Preservation Act of 1974 (54 U.S.C. § 321501-312508)

The Archaeological and Historic Preservation Act (AHPA) or Moss Bennet Act provides for the preservation of historical and archaeological data (including relics and specimens) that might otherwise be lost as the result of the construction of a dam or any alteration of the terrain resulting from federal construction project or federally licensed activity or program.

Archaeological Resources Protection Act of 1979 (16 U.S.C. § 470aa-470mm)

The Archaeological Resources Protection Act (ARPA) secures the protection of archaeological resources and sites on public lands and Indian lands and fosters increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data obtained before the date of the enactment. Unauthorized excavation, removal, damage, alteration, or defacement of archaeological resources on public lands is prohibited. ARPA sets forth criminal and civil penalties for such violations. The act requires a permit for any excavation or removal of archaeological resources from public lands not sponsored by the federal agency. ARPA identifies information about the location and nature of archaeological resources as sensitive information that may not be made available to the public unless such disclosure furthers the purposes of ARPA and does not create a risk of harm to the resources. Such information may be shared with State agencies dependent upon a commitment to protect the confidentiality of the information.

Coastal Zone Management Act of 1972 (16 U.S.C. § 1451-1466)

The Coastal Zone Management Act (CZMA) established laws and state coastal zone management programs designed to protect, preserve, and restore important ecological, cultural, historic, and esthetic values of our Nation's coastal communities and zones.

Historic Sites Act of 1935 (54 U.S.C. § 320101-320106, 102303, 102304, 309101)

The Historic Sites Act (HSA) declares it is a national policy to preserve, for public use, historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States. National Historic Landmarks may be designated by action of the Secretary of the Interior under authority of this law independently of National Register consideration. National Historic Landmarks, when so designated, are considered automatically listed in the National Register of Historic Places with National level of significance, per regulations implementing the National Register. The two designations are legally distinct.

National Environmental Policy Act (42 U.S.C. § 4321-4370c)

The National Environmental Policy Act (NEPA) requires all federal agencies to prepare a document, most commonly an Environmental Assessment (EA), which assesses the potential impacts of any proposed action on the environment, including impacts to cultural resources. If impacts are judged potentially significant, an Environmental Impact Statement (EIS) must be prepared. An EIS identifies any unavoidable adverse environmental effects, as well as alternatives to the proposed action, prior to its implementation. This process compels informed decision-making by federal agencies and their departments by requiring consideration of all relevant environmental consequences of proposed actions and involving the public in the decision-making process. As our basic national charter for protection of the environment, NEPA establishes policy, sets goals (Section 101), and provides means (Section 102) for carrying out the policy. Section 102(2) contains action-forcing provisions to make sure federal agencies act according to the letter and spirit of the Act. NEPA procedures must ensure environmental information is available to public officials and citizens before decisions are made and before actions are taken.

National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.)

The National Historic Preservation Act (NHPA) Establishes the federal historic preservation program including expansion and maintenance of a National Register of Historic Places (Section 101), requires all federal agencies to take into account the effects of their actions on the Nation's historic properties (Section 106), and directs federal agencies to assume responsibility for the preservation of historic properties that are owned or controlled by such agency (Section 110). NHPA establishes the State Historic Preservation Offices, the Advisory Council on Historic Preservation, the National Register of Historic Places, and federal agency Historic Preservation programs. NHPA further notes that the historical and cultural foundations of the country should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people.

Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. § 3001-3013)

The Native American Graves Protection and Repatriation Act (NAGPRA) protects Native American burial sites and regulates the removal of human remains, funerary objects, sacred objects, and objects of cultural patrimony on federal, Native American, or Native Hawaiian Home Lands during planned or unanticipated excavations. NAGPRA requires federal agencies and museums receiving federal funds to inventory holdings for such remains and objects and work with tribal groups and Native Hawaiian Organizations in a consultation process to reach agreements on the repatriation, transfer or other disposition of the remains and objects. This act provides for the determination of custody, protection, and repatriation of Native American human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony. It ensures the respectful treatment of these remains and objects and minimizes their exploitation prior to repatriation.

Public Buildings Cooperative Use Act (40 U.S.C. § 3306)

The Public Buildings Cooperative Use Act (PBCUA) directs federal agencies to acquire and use space in suitable buildings of historic, architectural, or cultural significance, and to encourage public access to and community use of public buildings for cultural, educational, and recreational activities.

Religious Freedom Restoration Act (42 U.S.C. § 2000b)

The Religious Freedom Restoration Act (RFRA) ensures interests in religious freedom are protected, including access to sacred land and sites. Government activity may substantially burden a person's free

exercise of religion only if the activity is in furtherance of a compelling governmental interest and is the least restrictive means of furthering that interest.

Executive Orders

Name	Citation	Date
Protection and Enhancement of the Cultural Environment	EO 11593	13 May 1971
Locating Federal Facilities on Historic Properties in Our Nation's Central Cities	EO 13006	21 May 1996
Indian Sacred Sites	EO 13007	24 May 1996
Preserve America	EO 13287	3 March 2003
Federal Real Property Asset Management	EO 13327	6 February 2004

EO 11593 – Protection and Enhancement of the Cultural Environment

Requires agencies of the executive branch of the Government to administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations; initiate measures that facilitate the preservation, restoration, and maintenance of federally owned sites, structures, and objects of historical, architectural, or archaeological significance; and, in consultation with the Advisory Council on Historic Preservation (ACHP), to institute procedures to assure that federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures, and objects of historical, architectural, or archaeological significance.

EO 13006 -- Locating Federal Facilities on Historic Properties in Our Nation's Central Cities

Encourages the use of suitable historic buildings of national, cultural, or architectural significance for federal facilities.

EO 13007 – Indian Sacred Sites

Requires executive agencies with administrative responsibility of federal land management to accommodate access to and ceremonial use of Indian sacred sites and avoid adversely affecting the physical integrity of sacred sites. Sacred sites may be eligible for the National Register of Historic Places.

EO 13287 – Preserve America

Establishes that the federal government shall recognize and manage the historic properties in its ownership as assets that can support department and agency missions while contributing to the vitality and economic wellbeing of the Nation's communities.

EO13327 -- Federal Real Property Asset Management

Mandates that general real property planning and management incorporates processes responsive to the requirements of EO 13287, which promotes long-term preservation and use of historic real property assets, including a descriptive database with the historic status codes of all real property.

Presidential Memoranda

Subject	Date
Government to Government relations with Native American Tribal Governments	29 April 1994

Government-to-Government Relations with Native American Tribal Governments

Recognizes the unique political relationship between the United States Government and Native American tribal governments. Executive departments and agencies are given principles that reaffirms them to conduct their activities in a manner respectful to the rights of self-government and self-determination with federally recognized tribal governments.

Federal Regulations

Citation	Title	Issuing Agency
15 CFR 930	Federal Consistency with Approved Coastal Management Programs	National Oceanic and Atmospheric Agency
32 CFR 229	Protection of Archaeological Resources (Note: Uniform ARPA regulations appear in four separate locations in the CFR, once for each agency mandated to issue enforcing regulations. See 32 CFR 229 for Department of Defense; 36 CFR 296 for Department of Agriculture; 43 CFR 7 for Department of the Interior; and 18 CFR 1312 for the Tennessee Valley Authority. Supplemental regulations appear with Dept. of Interior version).	Department of Defense
32 CFR 651	Environmental Analysis of Army Actions (AR 200-2)	Department of the Army
36 CFR 60	National Register of Historic Places	Department of Interior, National Park Service
36 CFR 63	Determinations of Eligibility (for National Register of Historic Places)	Department of Interior, National Park Service
36 CFR 65	National Historic Landmarks	Department of Interior, National Park Service
36 CFR 67	Historic Preservation Certifications Pursuant To Sec. 48(G) And Sec. 170(H) Of The Internal Revenue Code Of 1986	Department of Interior, National Park Service
36 CFR 68	Secretary of the Interior's Standards for Treatment of Historic Properties	Department of Interior, National Park Service
36 CFR 78	Waiver of Federal Agency Responsibilities, Under Section 110 of the National Historic Preservation Act	Department of Interior, National Park Service

36 CFR 79	Curation of Federally Owned and Administered Archaeological Collections	Department of Interior, National Park Service
36 CFR 800	Protection of Historic Properties	Advisory Council on Historic Preservation (ACHP)
36 CFR 1911	Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities;	Department of Justice and Department of Transportation
40 CFR 1500-1508	Regulations For Implementing the Procedural Provisions of the National Environmental Policy Act	Council on Environmental Quality
43 CFR 3	Preservation of American Antiquities	Secretary of Agriculture, Secretary of the Army, Secretary of the Interior
43 CFR 7	Protection of Archaeological Resources: Uniform Regulation (Subpart A) and Supplemental Regulation (Subpart B)	Secretary of the Interior
43 CFR 10	Native American Graves Protection and Repatriation Regulations	Secretary of the Interior

National Oceanic and Atmospheric Agency, Federal Consistency with Approved Coastal Management Programs, 15 CFR 930

Describes the obligations and roles of all parties who are required to comply with the federal consistency requirement of the CZMA and assigns responsibilities.

Department of Defense, Protection of Archaeological Resources, 32 CFR 229

Implements provisions of ARPA by establishing the uniform definitions, standards, and procedures to be followed by federal land managers in providing protection for archaeological resources on public lands and Indian lands of the United States. Establishes prohibited acts, criminal penalties, and permit requirements.

Department of the Army, Environmental Analysis of Army Actions (AR 200-2), 32 CFR 651

Implements NEPA, setting forth Army's policies and responsibilities for the early integration of environmental consideration into planning and decision making.

Department of the Interior, National Register of Historic Places (NRHP), 36 CFR 60

Sets forth the procedural requirements for listing properties on the National Register of Historic Places (NRHP) and authorizes the Secretary of the Interior to expand and maintain a National Register of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.

Department of the Interior, Determinations of Eligibility for Inclusion in the National Register of Historic Places (NRHP), 36 CFR 63

Formal process for resolving questions or disputes regarding the eligibility of properties for inclusion in the National Register of Historic Places.

Department of the Interior, National Historic Landmark Program, 36 CFR 65

Facilitates identification and designation of National Historic Landmarks (NHLs), and encourages the long-range preservation of nationally significant properties that illustrate or commemorate the history and prehistory of the United States. These regulations set forth the criteria for establishing national significance and the procedures used by the Department of the Interior for conducting the NHL Program.

Department of the Interior, Historic Preservation Certifications Pursuant to Sec. 47(G) and Sec. 170(H) of the Internal Revenue Code of 1986, 36 CFR 67

Established the program authority and function of Section 47 of the Internal Revenue Code which designates the Secretary of the Interior as the authority for the issuance of historic district statutes and of State and local historic districts, certifications of significance, and certification of rehabilitation in connection with certain tax incentives involving historic preservation.

Department of the Interior, Secretary of the Interior's Standards for the Treatment of Historic Properties, 36 CFR 68

Establishes standards for the treatment of historic properties including standards for preservation, rehabilitation, restoration, and reconstruction projects.

Department of the Interior, Waiver of Federal Agency Responsibilities Under Section 110 of the National Historic Preservation Act, 36 CFR 78

Authorizes the Secretary of the Interior to promulgate regulations under which the requirements in Section 110 may be waived in whole or in part in the event of a major natural disaster or an imminent threat to the national security.

Department of the Interior, Curation of Federally-Owned and Administered Archaeological Collections, 36 CFR 79

Establishes definitions, standards, procedures, and guidelines to be followed by federal agencies to preserve collections of prehistoric and historic material remains, and associated records, recovered under the authority of the Antiquities Act, the Reservoir Salvage Act (now the AHPA), the NHPA, or ARPA.

Advisory Council on Historic Preservation, Protection of Historic Properties, 36 CFR 800

Outlines how federal agencies carry out consultation responsibilities under Section 106 of the NHPA. It defines the roles of the ACHP, the State Historic Preservation Officer, the Tribal Historic Preservation Officer, and interested parties.

Department of Justice and Department of Transportation, Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities, 36 CFR 1191

Provides regulations allowing for the sensitive accessibility of historic buildings.

Council on Environmental Quality, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR 1500-1508

Provides regulations applicable to and binding on all federal agencies for implementing the procedural provisions of the NEPA, except where compliance would be inconsistent with other statutory requirements.

Secretary of Agriculture, Secretary of the Army, and Secretary of the Interior, Preservation of American Antiquities, 43 CFR 3

Places responsibility for ruins, archaeological sites, historic and prehistoric monuments and structures, objects of antiquity, historic landmarks, and other objects of historic and scientific interest on the Secretaries of Agriculture, Army, and Interior on federal lands that fall under their respective jurisdictions. Sets forth the types of permits that may be granted, to whom, and restrictions and requirements for authorized organizations who have obtained a permit for the examination of ruins, the excavation of archaeological sites, and the gathering of objects of antiquity.

Secretary of the Interior, Protection of Archaeological Resources, 43 CFR 7

43 CFR 7 Subpart A implements provisions of ARPA by establishing uniform definitions, standards, and procedures to be followed by all federal land managers in providing protection for archaeological resources located on public lands and Indian lands of the United States. 43 CFR 7 Subpart B includes Supplemental Regulations for the Department of the Interior (DOI) regarding determination of loss or absence of archaeological interest as well as permitting and collection procedures.

Department of the Interior, Native American Graves Protection and Repatriation Act Regulations, 43 CFR 10

Outlines the provisions and regulations of NAGPRA and provides a process for determining the rights of lineal descendants and Indian Tribes and Native Hawaiian Organizations to certain Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony with which they are affiliated.

Department of Defense Instructions and Guidance

Item	Title	Date
DoD Instruction 4710.03	Consultation with Native Hawaiian Organizations	25 October 2011
DoD Instruction 4715.16	Cultural Resources Management	18 September 2008

Department of Defense Instruction 4710.03: Consultation with Native Hawaiian Organizations

Provides policy and guidance and assigns responsibilities for DoD consultation with NHOs when proposing actions that may affect a property or place of traditional of traditional religious and cultural importance to an NHO.

Department of Defense Instruction, 4715.16, Cultural Resource Management

Establishes DoD policy and assigns responsibilities for the integrated management of cultural resource on DoD managed lands.

U.S. Army Regulations and Guidance

Item	Title	Date
AR 200-1	Environmental Protection and Enhancement	13 December 2007
AR 210-20	Real Property Master Planning for Army Installations	16 May 2005
AR 350-19	The Army Sustainable Range Program	30 August 2005
Headquarters Memorandum	Historic Property Guidance	27 December 2016

Department of the Army, Army Regulation 200-1 -- Environmental Protection and Enhancement (AR 200-1)

This regulation implements federal, state, and local environmental laws and DoD policies for environmental management, including cultural resources, to meet legal compliance requirements and to support the Army mission. Cultural resources are specifically defined as:

- Historic properties as defined in the National Historic Preservation Act (NHPA),
- Cultural items as defined in the Native American Graves Protection and Repatriation Act (NAGPRA),
- Archaeological resources as defined in the Archaeological Resources Protection Act (ARPA),
- Sacred sites as defined in Executive Order (EO) 13007 to which access is provided under the American Indian Religious Freedom Act (AIRFA), and
- Collections as defined in 36 CFR §79, Curation of Federally-Owned and -Administered Collections.

Requirements set forth in the National Environmental Policy Act (NEPA) of 1969 as amended, NHPA, ARPA, NAGPRA, AIRFA, 36 CFR 79, EO 13007, EO 11593, and Presidential Memorandum on Government-to-Government Relations with Native American Tribal Governments, define the basis of the Army's compliance responsibilities for management of cultural resources. Regulations applicable to the Army's management of cultural resources include those promulgated by the Advisory Council on Historic Preservation (ACHP) and the National Park Service (NPS).

Department of the Army, Army Regulation 210-20 – Real Property Master Planning for Army Installations (AR 210-20)

This regulation defines the real property master planning concept and requirement. It establishes policies, procedures, and responsibilities for implementing the real property master planning process. It specifies procedures for Real Property Master Plan (RPMP) development, approval, update, and implementation. It continues the requirement for the installation of Real Property Planning Boards. It also establishes a relationship between environmental planning and real property master planning in order to ensure that the environmental consequences of planning decisions are addressed. It establishes the requirement for complying with environmental documentation procedures. As such, it requires the inclusion of contributory sources of RPMP information, one of which is the ICRMP.

Department of the Army, Army Regulation 350-19 -- The Army Sustainable Range Program (AR 350-19)

This regulation defines the Integrated Training Area Management (ITAM) program's objectives as achieving optimal sustained use of lands for training and testing, integrating Army training and other mission requirements for land use with sound natural and cultural resources management, and advocating proactive conservation and land management priorities. It requires that the ITAM program be included in the INRMP and ICRMP to ensure the both plans reflect mission requirements for ranges and training lands.

Department of the Army, Headquarters Memorandum, Historic Property Guidance

This memorandum, dated 27 December 2016, provides policy, guidance, processes, and best practices for integrating historic property management with mission activities having the potential to affect historic properties and other cultural resources. The guidance implements the most current version of AR 200-1.

USAG-HI Regulations and Guidance

Item	Title	Date
USAG-HI-10	Environmental Policy	19 May 2014
USAG-HI-30	Standard Physical Termite Barrier Guidance for Sustainment, Restoration, Renovation, Modernization and Military Construction Projects	24 July 2015
USAG-HI-63	Landscaping with Native Plants	04 June 2014
USAG-HI-210-15	Disposition of Temporary World War II-Era Wooden Buildings	25 June 2009

Environmental Policy (USAG-HI-10)

Provides formal written environmental policy that also facilitates the incorporation of the 17 mandatory elements of the International Organization for Standardization 14001. Environmental Management system throughout the Garrison.

Standard Physical Termite Barrier Guidance for Sustainment, Restoration, Renovation, Modernization and Military Construction Projects (USAG-HI-30)

Sets the standard in regard to physical and chemical termite barrier methods and treatment standard used during construction, restoration, renovation, and modernization of facilities. These standards apply to historic buildings, and installation of physical barriers has the potential to adversely effect historic properties.

Landscaping with Native Plants (USAG-HI-63)

Establishes the policy of using local native plants to reduce the influx of invasive species, reduce water requirements, provide habitat for animals, and create a Hawaiian Landscape on post. This policy shall also apply in cases of cultural landscapes.

Disposition of Temporary World War II-Era Wooden Buildings (USAG-HI Regulation 210-15)

Establishes the procedures for the demolition of temporary facilities, especially those identified as World War II temporary wooden buildings, pursuant to the Programmatic Memorandum of Agreement for Demolition of WWII Temporary Buildings.

Secretary of the Interior’s Standards and Guidelines

The National Historic Preservation Act (NHPA) tasked the Secretary of the Interior to provide guidance and to set standards for federal agencies to use in fulfilling the purposes set forth in that statute. The Secretary of the Interior issued the following sets of standards and guidelines responsive to that task. These acts include preservation, rehabilitation, restoration, and reconstruction.

Item	Source												
Archaeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines (9/29/1983)	48 Federal Register (FR) 44716-44740, 29 September 1983												
<table border="1"> <tr> <td>Standards and Guidelines for Preservation Planning</td> <td rowspan="11">Current version available at: http://www.nps.gov/history/local-law/arch_stnds_1.htm</td> </tr> <tr> <td>Standards and Guidelines for Identification</td> </tr> <tr> <td>Standards and Guidelines for Evaluation</td> </tr> <tr> <td>Standards and Guidelines for Registration</td> </tr> <tr> <td>Note on Documentation and Treatment of Historic Properties</td> </tr> <tr> <td>Standards and Guidelines for Historic Documentation</td> </tr> <tr> <td>Standards and Guidelines for Architectural and Engineering Documentation</td> </tr> <tr> <td>Standards and Guidelines for Archaeological Documentation</td> </tr> <tr> <td>Standards and Guidelines for Historic Preservation Projects</td> </tr> <tr> <td>Qualification Standards</td> </tr> <tr> <td>Preservation Terminology</td> </tr> </table>	Standards and Guidelines for Preservation Planning	Current version available at: http://www.nps.gov/history/local-law/arch_stnds_1.htm	Standards and Guidelines for Identification	Standards and Guidelines for Evaluation	Standards and Guidelines for Registration	Note on Documentation and Treatment of Historic Properties	Standards and Guidelines for Historic Documentation	Standards and Guidelines for Architectural and Engineering Documentation	Standards and Guidelines for Archaeological Documentation	Standards and Guidelines for Historic Preservation Projects	Qualification Standards	Preservation Terminology	
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The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act (“Section 110 Guidelines”)	63 FR 2049-20508, 24 April 1998 Web version: https://www.nps.gov/history/fpi/Section110.html												

The Secretary of the Interior’s Standards for Preservation

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Preservation focuses on the maintenance and repair of existing historic materials and retention of a property’s form as it has evolved over time.

The Secretary of the Interior’s Standards for Rehabilitation

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property’s historic character.

The Secretary of the Interior’s Standards for Restoration

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods.

The Secretary of the Interior’s Standards for Reconstruction

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Reconstruction re-creates vanished or non-surviving portions of a property for interpretive purposes.

Archaeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines

These are general guidance issued by the Secretary of the Interior to promote effective and consistent historic preservation efforts by all federal agencies. They offer advice regarding appropriate professional practice for the general kinds of historic preservation tasks entailed by the NHPA – Planning, Identification, Evaluation, Registration, Documentation, and Implementation of Preservation Projects.

The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs pursuant to the National Historic Preservation Act

These standards and guidelines are usually called “the Section 110 guidelines.” They describe the necessary components of the full program mandated in Section 110 of the NHPA.

Advisory Council on Historic Preservation

Item	Source
Consultation with Native Hawaiian Organizations in the Section 106 Review Process: A Handbook, June 2011	http://www.achp.gov/Native%20Hawaiian%20Consultation%20Handbook.pdf
NEPA and NHPA: A Handbook for Integrating NEPA and Section 106, March 2013	http://www.achp.gov/docs/NEPA_NHPA_Section_106_Handbook_Mar2013.pdf

Consultation with Native Hawaiian Organizations in the Section 106 Review Process: A Handbook

This handbook from the Advisory Council on Historic Preservation states the current advice from the Council as to best practices for consulting with Native Hawaiian Organizations as required to comply with Section 106 of the National Historic Preservation Act.

NEPA and NHPA: A Handbook for Integrating NEPA and Section 106 March 2013

Provides advice on implementing provision added to the Section 106 regulations in 1999 that address the coordination of the Section 106 and NEPA reviews and the substitution of the NEPA reviews for the Section 106 process.

State of Hawai'i Statutes and Rules

These statutes and rules do not uniformly apply to actions by Federal agencies with respect to historic properties. However, Hawaii Revised Statutes (HRS) governing the treatment and disposition of Native Hawaiian human remains are germane to NAGPRA compliance and to consultations with Native Hawaiian Organizations and individuals.

These statutes and associated rules also set up the Hawaii Register of Historic Places with criteria materially similar though not identical to the criteria for inclusion in the National Register of Historic Places. USAG-HI should reasonably expect SHPD, acting in its capacity as the SHPO for the State of Hawai'i, to offer comments, advice, and opinions for Federal undertakings informed by the standards, definitions, and practices defined in these State authorities.

The following list of Hawaii Revised Statutes (HRS) and Hawaii Administrative Rules (HAR) are provided for reference purposes only and are therefore not described in detail.

Title	Reference
Prehistoric and Historic Burial Sites	HRS Section 6E-43
Inadvertent Discovery of Burial Sites	HRS Section 6E-43.6
Island Burial Councils; creation; appointment; composition; duties	HRS Section 6E-43.5
Rules Governing Procedures for Historic Preservation Review for Government Projects covered under 6E-7 and 6E-8, HRS	HAR 13-275, § 13-275
Rules Governing Standards for Archaeological Inventory Surveys and Reports	HAR 13-276, § 13-276
Rules Governing Requirements for Archaeological Site Preservation and Development	HAR 13-277, § 13-277
Rules Governing Standards for Archaeological Data Recovery Studies and Reports	HAR 13-278
Rules Governing Standards for Archaeological Monitoring Studies and Reports	HAR 13-279
Rules Governing Procedures for Inadvertent Discoveries of Historic Properties During a Project Covered by Historic Preservation Review Process	HAR 13-280
Rules Governing Professional Qualifications	HAR 13-281
Rules Governing Permits for Archaeological Work	HAR 13-282
Rules Governing Standards for Osteological Analysis of Human Skeletal Remains	HAR 13-283
Rules Governing Procedures for Historic Preservation Review to Comment on Section 6E-42, HRS Projects	HAR 13-284
Rules of Practice and Procedure Relating to Burial Sites and Human Remains	HAR 13-300

2. GEOGRAPHIC AND CULTURAL CONTEXT

2.1. Geographic Context

Hawaiian Islands

The Hawaiian Islands are an archipelago of 132 islands, reefs, seamounts, and shoals in a 1,523 mile northwest-southeast alignment in the middle of the Pacific Ocean. It is almost 2,500 miles from the nearest landfall with the west coast of the U.S. mainland.

Eight islands make up almost 99 percent of the total land area of the island chain. Situated at the southeastern end of the archipelago, each of the main islands is a volcanic remnant that has been eroded by a combination of wind, rain, streams, and waves. The age of the islands trends from the southeast, so that Hawai'i, the largest island of the chain, is the youngest and is still volcanically active, and Kaua'i and Ni'i'hau are the oldest and most eroded.

The islands were once characterized by distinct natural vegetation zones that have since been transformed by human use and modifications, beginning with the earliest Polynesian settlers of the islands (see Juvik and Juvik 1998 for a graphical comparison of the native island ecosystems before human settlement and at present). Based largely on rainfall and elevation, these vegetation zones have been reconstructed based on existing vegetation, remnant native vegetation in disturbed areas, climatic patterns, and paleoenvironmental research.

Windward vegetation zones include lowland and montane sub-zones. The montane zone extends into mountain bogs that occur in very wet, poorly-drained areas near mountain summits (Cuddihy and Stone 1990). The native lowland wet forest would have been dominated by 'ōhi'a (*Metrosideros polymorpha*) or koa haole (*Leucana glauca*), with an understory of native trees such as kōpiko (*Psychotria spp.*) and hame (*Antidesma platyphyllum*), the 'ie'ie vine (*Freycinetia arborea*), and a variety of ferns (depending on specific geographic locations). The native montane wet forest zone would have been dominated by a close-canopied 'ōhi'a forest with a well-developed understory of mixed native tree species, shrubs, and tree ferns. Bog vegetation is characterized by sedges and grasses (Mueller-Dombois and Fosberg 2013).

Leeward vegetation is similarly divided into lowland and upland sub-zones. The native lowland dry zone would have been an open parkland type of forest, with extensive grasslands and shrubs (Kirch 1985). The forest would have included wiliwili (*Erythrina sandwicensis*), naio (*Myoporum sandwicensis*), lama (*Diospyros ferra*), 'ohe (*Reynoldsia sandwicensis*), and sandalwood/'iliahi. (*Santalum spp.*). Grasslands would have included pili (*Heteropogon contortus*) as well as endemic grasses that now have a much more restricted range. The native upper dry forest would have been dominated by koa, with an understory of shrubs and vines (Mueller-Dombois and Fosberg 2013). Sub-alpine and alpine zones are present on the islands of Maui, Hawai'i and in these higher elevations vegetation is dominated by mamane (*Sophora chrysophylla*), naio and 'ohi'a trees.

Geographic Context of O'ahu

The island of O'ahu is the third largest of the eight main islands and is the social, political, and economic center of the State of Hawai'i. Land use is intensive, with large areas of the island developed for urban, industrial, residential, agricultural, and resort uses. Until recently, agriculture was an important component of the land use mix, but the decline of commercial sugar and pineapple has opened the way for more urbanization. USAG-HI installations occupy significant portions of the island, particularly the central plateau and the northern Ko'olau Mountain Range.

The island was formed by two major volcanic masses, the remnants of which are the Ko'olau and Wai'anae Mountain Ranges. The Schofield Plateau, at the center of the island, is the result of lavas from the Ko'olau Volcano flowing up against the older landform of the Wai'anae Volcano. The crest of the central plateau is over 880 feet above sea level (asl). The windward and leeward shores of the island are heavily eroded, with deeply indented amphitheater-headed valleys.

Sandy beaches encircle much of the island, with major fringing reefs on the windward and southern coasts. Uplifted coral exposures occur on the 'Ewa Plain (now an exposed limestone plain), along the leeward shore, and at a few localities on the north shore.

USAG-HI installations in the southern section of the island include Fort Shafter Military Reservation, Āliamanu Military Reservation, Tripler Army Medical Center, and Fort DeRussy Military Reservation.

Mākua Military Reservation and the Piliā'au Army Recreation Center (formerly Wai'anae-Kai Military Reservation) are located on the leeward coast of O'ahu.

USAG-HI installations on the north shore include Dillingham Military Reservation and Mokulē'ia Army Beach at the base of the Wai'anae Range.

The training ranges and cantonment of Schofield Barracks Military Reservation are situated at the crest of the central O'ahu plateau. On the southern slope of the plateau are Wheeler Army Airfield, Kunia Field Station, the Kīpapa Ammunition Storage Site, and the Waikakalaua Ammunition Storage Tunnels Site. On the northern slope is the Helemano Military Reservation and the Pūpūkea-Paalaa Uka Military Road.

The Kahuku and Kawailoa Training Areas are largely located in the northern Ko'olau mountain range of O'ahu, yet spread beyond these precise geographic boundaries. The Mauna Kapu Communication Station Site, however, is located entirely within the southern Wai'anae Mountains.

2.2. Cultural Context

The cultural context is presented in two major sections. The background section summarizes information related to Hawai'i in general, including mythological beginnings, island colonization, and general patterns of development. The subsequent section deals with the pre-contact and contact periods of O'ahu Island with specific emphasis on the areas in which USAG-HI installations are located.

Background

The history of the islands prior to European contact is based on a vast body of traditional Hawaiian material recorded in the nineteenth and early twentieth centuries, and on archaeological research that has been particularly intensive over the past 30 years. Hawaiian chronology derives from these two types of data. Traditional Hawaiian histories and royal genealogies are used for one framework, employing a specific numbers of years (varying from 20 to 30) per genealogical generation (Fornander 1969, Stokes 1930, Hommon 1976, Johnson 1994, Cordy 1996b, Masse and Tuggle 1998). The archaeological chronology is based on radiocarbon dating. Where possible, research on pre-contact Hawaiian history has integrated these two sources of dating (Emory 1959, Hommon 1976, Tuggle 1979, Cordy 2000, 1996b).

Mythological Beginnings

There is no single origin myth in Hawaiian traditions. Instead, there are numerous traditions concerning creation, island origins, the coming of the gods, and migrations. Traditions concerning island origins are found in the works of such Hawaiian writers as Malo (1951, 1996) and Kamakau (1991), as well as numerous authors in the Fornander collection (1969). Analyses of origin and migration traditions are found in nineteenth-century writings such as Fornander's 1878 and 1880 works (1969) and continue to be

carried out (Barrere 1969, Cachola-Abad and Kahaunani 1993, Tuggle 2000, Cordy 2000). It is clear that the traditional literature is a rich body of metaphorical and historical complexities.

Initial Colonization of the Hawaiian Islands

The date of initial island colonization has perhaps been the point of greatest disagreement among archaeologists working in Hawai'i. The following discussion is provided to fully contextualize the past 50 years of archaeological research in Hawai'i. The two main positions on the issue of Hawai'i's colonization have been labeled the "long count" and the "short count" (Graves and Addison 1995). Those favoring the long count have argued for settlement as early as A.D. 100-300 (Hunt and Holsen 1991, Kirch 2000, Cordy 2000). Those favoring the short count argue for colonization no earlier than A.D. 700-800 (Spriggs and Anderson 1993, Athens and Ward 1993, Masse and Tuggle 1998, Tuggle and Spriggs 2001, Kirch 2011, Kirch and McCoy 2007). However, recent research throughout the Hawaiian Islands has led to the general conclusion that the initial colonization of the Hawaiian Islands took place between AD 800 and 1200 (Kirch 2011, Wilmshurst et al. 2011, Dye 2011, 2014, 2015, Dye and Pantaleo 2010, Athens, Rieth, and Dye 2014), but further research is needed to narrow this date range, and reanalyze all previously dated sites. This date range stems from advances in scientific understanding of the factors influencing the results of radiocarbon dating. The effects of using long-lived species, or "old" wood, for radiocarbon dating has generally been resolved with the application of stringent 'chronological hygiene' protocols (see (Rieth 2011, Kirch 2011, Dye 2015) for more in-depth discussions). The importance of the date of colonization lies in the implications for rates of population growth, patterns of settlement expansion, and single versus multiple voyages to Hawai'i. On this last point, some favor only one voyage of colonization (e.g., Cordy 2000), while others support the episodic migration hypothesis (Cachola-Abad and Kahaunani 1993, Anderson, Chappell, and Grove 2006, Bellwood 2013).

A less contentious point is the area of Hawaiian origin, which is generally believed to have been the Marquesas Islands (Cordy 2000, Kirch 2000, Van Tillburg 2003, McGregor 2007), however this conclusion rests on very limited data (Allen 2014).

General Patterns of Cultural Development

The cultural development periods discussed below have not yet been refined in the academic literature to reflect the updated radiocarbon chronology discussed above. Kirch and McCoy (2007) suggest the substitution of the Colonization Period (c. A.D. 800-1000) and the Developmental Period (c. A.D. 1000-1200) with the Foundation Period following (c. A.D. 800-1200). Given a general lack of research re-contextualizing these periods, this terminology has not been followed in the following discussion. The more ingrained terminology of Colonization and Development Periods has been utilized for clarity and precise relation to the body of archaeological literature.

The generally accepted model of Hawaiian cultural development (Tuggle 1979, Kirch 1985, Cordy 2000, McGregor 2007) emphasizes early settlement in the rich windward environments and later expansion into the drier leeward regions. Linked to expansion was associated population growth and increasing political complexity.

During the Development Period, McGregor (2007) indicates that Hawaiian culture began to emerge in distinct patterns. Island inhabitants developed a culture and language uniquely adapted to the Hawaiian Islands that was different from other Polynesian peoples. What emerged was a very organized, self-sufficient subsistence social order with extended sovereign control over the archipelago of Hawai'i. The communal social system centered on providing subsistence to large, extended multigenerational families. Hawaiian spiritual life focused on maintaining harmonious relationships with nature and the deities. Land and its resources were also communal.

Radiocarbon data clearly show that the period of major population growth and settlement expansion was during the Expansion Era, from about A.D. 1150 to 1400 (Dye and Komori 1992, Dye 1994, McGregor 2007). The evidence from archaeology and Hawaiian traditions (employing genealogical generations for dating) suggests that political complexity and large polities developed in the later portion of that era. It was during this era that powerful lineages of the kings of O‘ahu (the Maweke line) and Hawai‘i (the Pili line) were founded. Archaeologically, this was the initial period of large temple construction, development of royal centers, and agricultural expansion and intensification (Kolb 1991, Dye 1994, Cordy 1995, 1996a, b, 2000). Alternative hypotheses pose that (a) environmental change or (b) the introduction of sweet potato (*Ipomoea batatas*) was a critical factor in the development or intensification of the large dryland field systems of leeward Hawai‘i (Rosendahl and Yen 1971, Yen 1974).

Agricultural expansion and population growth continued over the next centuries, until at least A.D. 1700. The extent to which population and agricultural development had stabilized, or perhaps even declined, during the century before European contact is still being investigated (Tuggle 1979, Kirch 1984, Dye and Komori 1992, Dye 1994, Ladefoged, Graves, and McCoy 1996, Cordy 2000). In any case, the settlement pattern of the islands that was described at the time of contact had been clearly established by A.D. 1700, including population centers, royal centers, temples, and expansive dryland and irrigation agricultural field systems (Armstrong 1973, Tuggle 1979, Juvik and Juvik 1998).

Traditions and archaeology indicate periods of intensive warfare and political expansion in the final century of Hawaiian cultural development before European contact in 1778, at which time there were four competing kingdoms. The kingdom of Hawai‘i (Hawai‘i Island and a section of Maui) was ruled by Kalani‘ōpu‘u. The kingdom of Maui (Maui, Lāna‘i, and Kaho‘olawe) was under Kahekili. The kingdom of O‘ahu (O‘ahu and Moloka‘i) was under the rule of Peleioholani. Kaua‘i and Ni‘ihau were the realm of Kaneoneo.

Traditional Hawaiian Context

Hawaiian Cultural Context: O‘ahu

The following discussion relates the prehistory of O‘ahu in relation to the previous discussions on the initial colonization of the Hawaiian Islands as split into the two camps (discussed above). The new dating scheme relies on a very stringent chronological hygiene protocol that rejects anything other than charcoal of short lived species (Kirch 2011). Given a need to re-date many archaeological sites the following discussion relies predominantly on studies conducted prior to the current consensus and revised sampling protocols. Where possible revised chronological information is provided.

The previously earliest known permanent habitation site excavated on O‘ahu was the Bellows Dune site (Pearson, Kirch, and Pietruszewsky 1971). The question was whether it was occupied as early as A.D. 300-600 (Kirch 1985) or as late as A.D. 800-900 (Tuggle 1997, Tuggle and Spriggs 2001). There are other places on O‘ahu that have yielded dates in the earlier range, but like the Bellows dates, these are by no means generally accepted (see Cordy 1996b for a positive summary and Tuggle 1997 for a negative summary). At the same time, none of these other sites have been excavated in the detail of Bellows work. However, Bellows Dune and others have recently undergone exceptionally systematic re-dating using stringent chronometric hygiene resulting in significantly different dates across the island. Bellows Dunes Site (O18) has been re-dated to AD 1040-1219 (Dye and Pantaleo 2010). With significantly different results such as this the precise site level prehistory of O‘ahu requires an island wide re-dating effort and synthesis.

One of the standing hypotheses for the earliest settlement pattern is that settlers made their homes on the windward shore of the island where high rainfall results in fertile valleys, permanent water sources, and rich natural resources that would have facilitated settlement in a new land. In early years, they

probably ventured to the drier southern and western areas only for selected resources like fish and birds. This hypothesis, developed before the recent re-dating effort, theorizes that from A.D. 1000 on, Hawaiians moved outward from their original settlements, spreading into leeward areas along O‘ahu’s southern shores (Cordy 1996b). This hypothesis has not yet undergone systematic testing, yet remains one of the more viable models for initial population spread.

By the A.D. 1200s, three major competing districts developed out of earlier small and independent political units. These districts were Kona, Ko‘olau (later divided into Koolauloa and Koolaupoko), and Greater ‘Ewa (the later districts of ‘Ewa, Wai‘anae, and Waialua) (Cordy 1996b). The dominant line of ‘Ewa chiefs was that of the Maweke-Kumuhonua genealogy. Maweke is one of the main figures in the voyaging era of Hawaiian traditions, which occurred sixteen generations from the founder of the O‘ahu line, Na‘nau. In turn, Na‘nau and his brother Ulu were thirteen generations from Wakea and Papa, the sacred and deified ancestors of Hawaiians (Kamakau 1991, Fornander 1969). With Maweke, the lineage of ancient Polynesia was transformed into a distinctly Hawaiian lineage (Fornander and Thrum 1919), and Maweke’s offspring came to rule various parts of O‘ahu.

The A.D. 1150-1400 period of rapid growth saw development of new settlements and expansion of both wet and dry agricultural complexes, notably in the Kāne‘ohe region, along the outlets of the streams feeding Pu‘uloa (Pearl Harbor), and in the Wai‘anae valleys. Kūkaniloko, the sacred place of birth on the central plateau, and Ulu-Po heiau on the windward side of the island may have been constructed by the late A.D. 1300s.

The fifteenth and sixteenth centuries saw the Hawaiian political system change, as ‘primary states’ (Hommon 2013) organized political, social and economic power, gradually replacing kinship as the means of legitimizing rule (Kolb 1991, Hommon 1986). One way that chiefs expressed their power was through construction of monumental architecture including temples, irrigation systems, and fishponds (Cordy 1996b), all requiring the ability to mobilize enormous expenditures of labor. Traditions say the taro fields (and presumably the fishponds) of the Waikīkī Plain were built by the chief Kalamakua at this time. It is probable that many of the large temples of O‘ahu were also constructed during this period.

The unified O‘ahu kingdom disintegrated in seventeenth century and was replaced by warring factions among district chiefs. However, in the early A.D. 1700s, the chief Kualii re-established the primacy of the island (Kanahale 1995). When Kualii came to power, he had numerous struggles with the chiefs of various districts, including at least two rebellions from the chiefs of ‘Ewa (Fornander 1969), who were defeated in battles in the southern central plateau.

Western Contact Context

When Captain James Cook arrived in Hawai‘i in 1778, the Native Hawaiian population was estimated at 400,000 to 800,000 (Kirch and Rallu 2007). Beginning early in the contact period foreigners began staying on the islands, and in the process the introduction and gifting of western crops, animals, and products to the islands began. The westerners also brought new diseases such as cholera, whooping cough, dysentery, venereal diseases, measles, influenza, and bubonic plague that raged as epidemics, decimating Hawaiian communities (McGregor 2007). The population on O‘ahu was particularly vulnerable, already weakened by the havoc wreaked by the inter-island wars of the late 1700s. In 1804, David Malo recorded that half the island’s population had perished due to either cholera or bubonic plague (McGregor 2007). The disruption and turmoil of warring factions, further compounded by the effects of European contact, hastened shifts in Hawaiian culture resulting in extensive and systemic social and political changes directly related to the introduction of western technology, disease, theories and lifeways (Hays 2002).

Captain Cook moored offshore the Kauaʻi and Niʻihau Islands in 1778, and named the archipelago the Sandwich Islands, in honor of the Earl of Sandwich, the sponsor of his voyage (Herman 1999). Captain Cook returned the next year visiting Hawaiʻi Island and died before returning to England. The publication of Captain Cook’s voyages in the Pacific, was soon followed by other ships visiting the islands, which left a many sailors and adventurers behind. Within a decade of Cook’s arrival in the islands, the British, Spanish, and Americans began to recognize the rich natural resources of the area. The presence of the Chinese fur market in the Pacific Northwest resulted in the development of trade between the northwest coast and China. The Hawaiian Islands proved to be the perfect resupply and wintering point for these trade ships. In turn, Hawaiian chiefs took these opportunities to trade island resources for goods and weapons (Van Tillburg 2003, Herman 1999).

The course of Hawaiian history was significantly altered by these cumulative events. Direct Western contact, while limited at times, was constant and ever increasing throughout this period. Hawaiʻi became a regular stop for British, American and Russian whaling vessels crossing the Pacific. Beginning in this early phase, Hawaiians began to travel aboard western ships, engaging with and learning western techniques and technologies.

Inter-Island Wars of Conquest

The history Inter-Island Wars of Conquest are varied and complex, yet this account will generally touch on the actions of Kamehameha I. The early life of Kamehameha I is largely unknown, yet Traditional Narratives tell that he was separated from his parents early in life, and that he was raised in the *aliʻi* class from which he was chosen for training as a warrior. By the landfall of Captain Cook, Kamehameha had already begun rising in rank and influence, yet it was not until 1782 that he officially began taking steps to consolidate power and influence (Hays 2002). During Kamehameha I’s quest for island unification in the late eighteenth century, he amassed and moved huge armies through many staging points, battles, and battle aftermaths. Several of the USAG-HI installations fall in areas that felt the tread of Kamehameha’s army.

The wars on Oʻahu continued unabated after the reign of Kualii, when Kualii’s successors had less success in maintaining a unified domain. At the time of western contact in 1778, Peleioholani, a son of Kualii, was ruling chief of the island. When he died a year later, the king of Maui, Kahekili “the warrior-chief of the black tattoo” (Kanahale 1995), immediately attacked Oʻahu and defeated his successor Kahahana, who was eventually captured and killed in about 1785. Later, in revenge for a plot against him by the remaining Oʻahu chiefs, Kahekili initiated a “war of extermination” and the “native Oʻahu aristocracy were [sic] almost entirely extirpated” (Fornander 1969).

Maui claims to Oʻahu ended shortly after Kahekili’s death, when the Hawaiʻi island chief Kamehameha attacked. He landed his forces at Waikīkī and encamped along the sandy beaches from Waiʻalae around Diamond Head to Kālia (Kanahale 1995). The invasion ended at the battle of Nuʻuanu when Oʻahu warriors, finding themselves trapped at the precipice of the Koʻolau cliffs by the overwhelming and superior forces of Kamehameha, chose to leap to their deaths.

The successive conquests of Oʻahu, first by Kahekili and then by Kamehameha, severely damaged the chiefly families of the island, and resulted in new land distributions and an influx of population from other islands.

Kawaihae I projected his force from the island of Hawaiʻi, yet in 1790, several events occurred that allowed Kamehameha to begin consolidating his power: the appropriation of two British ships: the *Eleanor* and the *Fair American* along with the imprisonment of their captains; his marriage to Kalola, a high-ranking woman from Molokaʻi; and the initiation of construction of Puʻukoholā, the heiau where he ultimately

solidified his ultimate conquest of the island with the sacrifice of his adversary Keōua in the temple dedication (Kuykendall 1938). Kamehameha also maintained a residence at Pelekane in Kawaihae, just north of Pu‘u Koholā and inland of Kawaihae Military Reservation.

From around 1793, John Young resided at Kawaihae with the task of supervising the construction of Kamehameha’s war fleet in preparation for the invasion of Kaua‘i (Sahlins 1992). By the time Kamehameha embarked on the invasion in 1802, he had 7,000 to 8,000 warriors under his command. Such numbers suggest the use of the Kawaihae coast as a staging area increased pressure on local resources (Kirch and Sahlins 1992).

The constant state of inter-island wars ended in 1802 with a complete consolidation of power under Kamehameha, excepting Kaua‘i, which would transfer peacefully to Kamehameha’s Kingdom in 1810. For a more detailed review of the Inter-Island Wars and the life of Kamehameha I refer to (Cordy 2000).

At Kamehameha’s death in 1819, his widows and heir brought about the formal end of the kapu system. Shortly thereafter, the first Christian missionaries arrived and found an environment ripe for new converts as the Hawaiian’s traditional polytheistic religious system was greatly challenged by the rapid social changes occurring at least in part as a result of Western influences. Other foreigners settled in the island frontier, bringing with them new diseases that resulted in massive population decline, and a new economic basis in cash. Introduced cattle, that had gone feral, destroyed garden plots and agricultural fields. Hawaiians moved en masse to developing ports. Drastic labor re-allocations came from pursuits such as the collection of sandalwood and commercial development of sugarcane and rice. The redistribution and privatization of land had a far-reaching effect on Hawaiian settlement patterns.

Nineteenth Century Context

The nineteenth century historic context presents a general framework for understanding the cultural resources of the period in Hawaiian history following the point of western contact. This section summarizes the nineteenth century history of the islands, focusing on some of the critical factors that resulted in a transformation of the Hawaiian landscape. These factors include: the finalization of the inter-island wars that culminated in Kamehameha’s unification of the islands, the effects of westernization on settlement and land use (primarily through the introduction of new economies, such as ranching, commercial agriculture, and new technologies), and especially by the drastic change in the concept of land ownership brought about by the mid-nineteenth century Māhele.

Background

The 1800s served as a transformative period for Hawai‘i. The final battles of the Inter-Island Wars were fought in 1802, with the complete consolidation of power in Kamehameha I’s Kingdom by 1810. Given the shifting balance of power within and between the Hawaiian Islands the court of Kamehameha I moved many times during his reign from Hawai‘i to O‘ahu, where he first settled at Waikīkī and then moved to Honolulu then back to Hawai‘i Island before his death. The capitol later shifted to Maui before moving back to Honolulu in 1845.

In the aftermath of Kamehameha’s death in 1819, the traditional kapu system was overthrown and abandoned. The rebellious factions tended to blame foreign influence and change. These influences and changes would become exacerbated following the arrival of missionaries in 1823. The missionaries held a precarious place in Hawaiian society having been welcomed by the Hawaiian chiefs, accepted by the rulers, and yet would become generally distrusted. The relationships between Hawaiians and westerners devolved over the century, becoming precarious in the mid to late nineteenth century.

During the first half of the century, the intensification of commercial agriculture resulted in new waves of immigrants. The change in the land tenure system (the Māhele) served as a significant turning point in Hawaiian land ownership. The new system provided for western style individual fee land ownership that encouraged western-style development of agricultural business, further impacting Hawaiian lifestyles and land use.

The physical landscape of the islands was inexorably transformed. The introduction of cattle to Hawai'i in the late 1700s had a horrific environmental effect. With a kapu in place for the first decade, cattle were allowed to range free, and subsequently ran amok in native gardens and across the native forests (see discussion below). The sandalwood trade of the first three decades of the nineteenth century had an equally devastating effect on the landscape. Used for wood and incense in China, the supply of sandalwood was soon stripped from the mountains. The need for firewood in urban areas and as part of the whaling industry had similar impacts. Frequent forest burning and cutting in the relentless quest for sandalwood, *'iliahi*, (Chamberlain 1957, Kirch and Sahlins 1992) and firewood (Cuddihy and Stone 1990), combined with the effects of free-ranging cattle, resulted in massive deforestation and erosion. Commercial agriculture in the second half of the century spread sugarcane, pineapple, and other cash crops across the landscape (Kirch and Sahlins 1992).

In the first half of the nineteenth century, the Hawaiian government moved from a highly stratified political order dominated by island and inter-island kings, to a constitutional monarchy reflecting a restructuring of the Hawaiian political order within a western framework. During this transition several changes took place, including Kamehameha's complete unification of the islands, the rejection of the kapu system, and the premiership of Ka'ahumanu (Seto Levin 1968). By the mid-century, the Māhele had introduced fee simple land ownership, which further encouraged westerners to develop agricultural lands. The century ended with the overthrow of the monarchy and eventual annexation by the U.S. government (Kirch and Sahlins 1992).

Changing Agriculture

Due to an increase in Euro-American immigration, together with western economic and land use practices, the local landscape was significantly affected. Natural resources of the islands were sometimes commercialized to devastating effect on both the resource and the Hawaiian population. Some of the most notable examples are sandalwood, *'iliahi*; timber for firewood, *pulu*; and native birds (Chamberlain 1957, Ellis 1963, Kuykendall 1938, Glidden 1998, Olson 1941).

In the first half of the nineteenth century Hawai'i was introduced to westernized commercial crops such as Irish potatoes and western vegetables, and during the second half of the century, the sugar industry took root.

The impetus for the sugar industry was the Reciprocity Treaty of 1876 in which the Hawaiian government granted the United States permission to develop Pearl Harbor in exchange for allowing the duty-free import of Hawaiian sugar to U.S. markets. Sugar fields, mills, and rail lines sprang up throughout the islands. An intricate combination of groundwater pumping, fluming, and tunneling brought valuable water from source to fields, sometimes across far distances. Even on the arid leeward coast of O'ahu where permanent streams are almost non-existent, sugar fields spread across valley floors, with water piped and flumed from one valley to the next. Labor was also a requirement, and to meet this need, foreign workers were imported, primarily from Asia.

Sugar was grown in the Dillingham Military Reservation area. Kahuku Training Area was part of the Kahuku Sugar Plantation. The gulch areas now occupied by Kipapa and Waikakalaua Ammunition Storage facilities were once part of sugar operations.

In 1900, James B. Dole came to Wahiawā with ideas for growing pineapple for a canning operation (Nedbalek 1984). By 1910, there was pineapple growing on thousands of acres both north and south of Wahiawā. The industry flourished through the first half of the twentieth century. Infrastructure and labor requirements were similar to, and had similar effects as, the sugar industry. A portion of Wheeler Army Airfield and Helemano Military Reservation were once part of the extensive central plateau pineapple fields.

As part of the economic development on O‘ahu, a railroad was envisioned by Benjamin Dillingham. He raised capital through the government and subsequently, with his business partners, built, owned, and operated the O‘ahu Railway and Land Company (OR&L Co.). The OR&L Co. was chartered in 1889 and construction began immediately after its incorporation on a narrow gauge steam railway between Honolulu and the Pearl River Lagoon (later Pearl Harbor). The historic mainline right of way is 40’ wide and begins in Pearl Harbor near West Loch and runs past Barbers Point Naval Air Station, Ka‘ena Point, Dillingham Air Field, Waimea Bay, and Ewa, before terminating at Kahuku (Livingston 2014). In 1906, a branch line was completed from Waipahu up the Waikakalua Gulch to Wahiawā and the pineapple fields of central O‘ahu (Ruzicka 2012). The military was one of the most important customers of the OR&L Co. with the development of branch lines for passenger travel to and from Pearl Harbor, Hickam Field, Schofield Barracks, and Wheeler Army Airfield. With few exceptions the entire railway was abandoned by 1971 when OR&L Co. operations ended (Cummins 1974). A section of the historic railway between Nānākuli and Honouliuli was listed in the National Register of Historic Places on December 1, 1975 as a well-preserved remnant of the original OR&L Co. right of way. No section of the railway listed on the NRHP is within current Army jurisdiction.

The railroad was exclusively set on a 36” gauge, and properties related to the railroad include road beds, railroad ties, trestles, bridges, and standing structures such as platforms and cargo loading areas (Cummins 1974).

Ranching

In 1793, Captain George Vancouver introduced cattle to Hawai‘i. Kamehameha immediately instituted a kapu on the animals for a period of ten years. The animals became a serious problem as they survived and reproduced handsomely in the wild. Ellis (1963) writes that the cattle “resorted to the mountains and became so wild and ferocious that the natives are afraid to go near them.” The trade of bullock hunting began in the early 1800s, and by the 1820s, it was an industry, with commodities of hides and tallow for local use and export, and salted and barreled beef for the growing provisioning trade related to Pacific whaling.

Cattle hunting gradually evolved into cattle ranching, with much of the initial ranch stock coming from wild cattle herds. By mid-century ranchers began a movement to improve the stock by importing purebred cattle.

Like cattle, goats and sheep were introduced to Hawai‘i in the late eighteenth/early nineteenth centuries and, in some instances, became a serious threat to the health of the island environment with erosion, the destruction of indigenous fauna and faunal resources, and a shift in physical land use patterns all resulted in a changed landscape. Ranching took place on almost all areas now covered by USAG-HI installations. In the late 1800s, James I. Dowsett had ranching interests on lands now occupied by Fort Shafter, Schofield Barracks, and Wheeler Army Airfield; portions of the latter two were part of his extensive Leilehua Ranch. Cattle from George Galbraith’s Mikilua Ranch in Lualualei Valley on the Wai‘anae coast may have been herded across Kolekole Pass to pasture on Leilehua Ranch plateau lands.

The Dillingham Military Reservation was once part of the larger Dillingham Ranch. Kīlauea Military Camp was used as pasture for Shipman’s Keauhou Ranch.

Military Context

The military historic context presents a framework for understanding the cultural resources of twentieth-century Hawai‘i, emphasizing the presence of the U.S. Army on the islands.

Prelude to the Army in Hawai‘i

In 1872, Major General John M. Schofield, Commander of the Army Division of the Pacific, came to Hawai‘i on a mission to evaluate the defense possibilities of various Hawaiian ports (Alvarez 1982). Recognizing the potential importance of Pu‘uloa Lagoon as a harbor that could be inexpensively and effectively defended, he recommended that it be developed as a military base. In the Reciprocity Treaty of 1876, the Hawaiian government granted the United States permission to develop the harbor in exchange for allowing the duty-free import of Hawaiian sugar to United States markets. The Hawaiian monarchy was overthrown in 1893, and four years later in 1897, the U.S. was given exclusive use of Pu‘uloa. The Navy named it Naval Station, Honolulu in 1899, then Naval Station, Hawai'i by 1901. The name 'Pearl Harbor' came into use after 1908.

Early Territorial Era (1898-1941)

The Hawaiian monarchy was overthrown in 1893, which led the republican government to appeal for annexation into the United States, eventually succeeding in August 1898. In the late nineteenth and early twentieth century, the U.S. became embroiled in international politics as other countries began testing their military, political, and economic strengths. The newly-annexed Hawaiian Islands appeared to be a boon to the U.S. as a strategically located site in the Pacific “as the Gibraltar of the Pacific Ocean, the forward bastion, which, along with the Panama Canal Zone and Alaska, would form a cordon to protect the American west coast. Pearl Harbor ... stood as the centerpiece of the work” (Alvarez 1982).

Continuing an effort to expand the American power base into the Pacific, the Spanish-American War prompted Congress to gain and develop properties in the western Pacific, as well as Cuba and Puerto Rico. This effort emphasized the United States’ commitment to connect the Atlantic and Pacific Oceans across the Panama Isthmus.

As U.S. concern for the protection of the American west coast and central Pacific increased, the government devised “War Plan Orange,” to be utilized in case of war with Japan. This plan, which had been under development as early as 1890, called for making Hawai‘i the first line of defense in the central Pacific. Though the plan changed as relations between the U.S. and Japan changed, the importance of the Hawaiian Islands as a base for advanced military operations for the United States remained paramount (Van Tillburg 2003).

In addition to its outstanding defensive position, the military also viewed the Hawaiian Islands as a strategic point of mobilization for operations in the Western Pacific, especially the Philippines (Linn 1996). The locals referred to the U.S. soldiers as the “pineapple army” (Farber and Bailey 1996).

The Early Years

Prior to annexation in 1898 little development of the coaling station obtained under 1887 agreements occurred (Livermore 1944, Apple and Levy 1974). Four days after annexation in 1898, the 1st New York Volunteer Infantry Regiment, the 3rd Battalion, and the 2nd U.S. Volunteer Engineers arrived in Hawai‘i and set up a temporary camp called Camp McKinley at the foot of Diamond Head (Addleman (Lt) 1946).

The following year, regular Army troops encamped at Camp McKinley, and support elements established offices in nearby Honolulu. By the end of the century, U.S. forces in Hawai'i were bolstered by a Depot Quartermaster Office and two batteries of the 6th Artillery Regiment (Addleman (Lt) 1946). According to Linn (1996) between 1899 and 1902, Army troop numbers in Hawai'i grew from "a handful of engineers" to over 8,000 soldiers. The principal mission of the U.S. Army in Hawai'i was the defense of the naval base at Pu'uloa, now referred to as Naval Station, Hawai'i.

Thus, in the first years of the twentieth century, plans were made for the development of Pearl Harbor as a primary Pacific naval base, for coastal and land defenses to protect Pearl Harbor, and for construction of Hawai'i's first U.S. Army post at Kahauiki. Construction at Kahauiki began in 1905, and the first area, a battalion cantonment at Palm Circle, was completed in 1907-1908; the new post was named Fort Shafter after Major General William R. Shafter.

The Army proceeded with developing an installation on the central plateau in 1908. The post was eventually named Schofield Barracks after Major General John Schofield. During this same period, a system of coastal defenses was built along the southern shore of O'ahu. These included Forts DeRussy and Ruger in Waikiki, Fort Armstrong at the mouth of Honolulu Harbor, and Fort Kamehameha at the entrance to Pearl Harbor.

World War I

The United States entered World War I in April 1917. The Ordnance Department, which maintained a system of armories, proving grounds, and multiple arsenals, expanded its network of depots in 1917; this included the formation of the Hawaiian Ordnance Depot at Fort Shafter. The Signal Corps was expanded in 1914 to include the Aviation Service.

In Hawai'i, participation in the Great War meant that most of the regular Army departed for Europe by the end of 1917, leaving empty posts in need of caretakers. The Hawaiian National Guard took on the role, entering Federal service at Schofield Barracks and Fort Shafter as the 1st and 2nd Hawaiian Infantry Regiments. Addleman (1946) writes: "The selective service draft filled these organizations to war strength. Many of these draftees were aliens, principally Japanese and Filipinos." These regiments were garrisoned at Schofield Barracks and Fort Shafter from October 1918 to April 1919.

With the Armistice signed in 1918, the National Guard remained at Schofield Barracks until replaced by the returning regular Army. The Guard spent the post-Armistice period at maintenance and beautification projects, "planting trees and shrubs, seeding lawns, building roads, and working on general landscape improvement including a double line of eucalyptus trees was planted around the post" (Addleman (Lt) 1946). In 1919, the Guard vacated Fort Shafter when the 9th Signal Service Company arrived.

The Inter-War Period

The Inter-War period represented a significant era in the developmental history of Army bases in Hawai'i, namely Schofield Barracks and Wheeler Army Airfield. Both bases saw widespread building campaigns that created the building stock and landscapes that exist to this day.

In the 1920s, the Army experimented with new technologies and re-evaluated old ones, with significant effects on posts in Hawai'i. This decade saw the birth of the Army Air Corps and the increased changes to military lands on the islands.

In the early 1920s, the Army's organizational structure evolved. The National Defense Act of 1920 replaced the Army's geographically based departments with nine corps areas, as well as comparable departments in the overseas possessions of Panama, Hawai'i, and the Philippines. In 1921, a new unit,

the Hawaiian Division, was established at Schofield Barracks. At the time, it was the only complete division in the Army (Meeken 1974).

In 1921, the Artillery District of Hawai'i was re-designated Hawaiian Coast Artillery District, and its headquarters was moved from Fort Ruger, Diamond Head Crater on O'ahu, first to the Alexander Young Hotel in Honolulu, and then shortly after to Fort Shafter. Fort Ruger was re-organized as a subordinate command, Coast Defenses of Honolulu (Meeken 1974).

Although budgetary restraints were placed on military services in general during this period, Hawai'i's location made it an exceptional site for Pacific defense and allowed for increased funding. One of the treaties signed after World War I was the Limitations of Armament Treaty of 1921, which prohibited the building of new U.S. military defenses west of Hawai'i. Because of this, Pearl Harbor and the associated Army facilities took on ever-increasing importance in terms of Pacific strategy and national defense (Conn, Engelman, and Fairchild 1964, Alvarez 1982).

In October 1921, the Army took control of Kīlauea Military Camp on the north edge of Kīlauea Crater and it became the first U.S. Army installation on the island, with the primary purpose of providing rest and recreation facilities for Army personnel. On the island of Hawai'i, a new Army command, the District of Hawai'i, was created with authority over the entire island, except for Kīlauea Military Camp, which was considered a separate post command. Headquarters for the new district was in the Hilo Armory.

In the 1930s with the rise of German and Japanese threats, U.S. military strategists viewed Hawai'i as a major defensive site. The development of effective aircraft carriers, with the increased potential for air attacks, prompted the Army to strengthen its anti-aircraft defenses. Both fixed and mobile anti-aircraft stations were set up throughout the islands (Alvarez 1982).

In 1937 with the beginning of the Sino-Japanese War, Hawai'i saw an increase in defense mobilization. By the eve of America's entry into World War II, the military's presence dominated the Islands and served as the largest source of income and employment and by 1940, approximately 48,000 troops were stationed in the Islands (Farber and Bailey 1996, McGregor 2007).

World War II (1941-1945)

On the morning of December 7, 1941, Japanese planes swept over the islands in a surprise attack with most damage occurring at Pearl Harbor, Hickam Field, and Wheeler Field and incidental damage to other installations (Allen 1950).

In the aftermath of the attack, Hawai'i shifted to a state of continuous emergency. For a year and a half, the threat of invasion weighed heavily on everyone's minds, with troops remaining on defensive alert. The Army declared martial law and used this authority to expand military control into all parts of the islands. Beach positions were strengthened with trenches, gun positions, pillboxes, and rolls of barbed wire.

Mobilization

During the war, Hawai'i played a crucial role as the advanced base for the Pacific war. It was a base of operations for military staging, supply, and casualty evacuation, as well as headquarters for numerous Federal agencies and construction firms doing government work in forward areas (Allen 1950, Van Tillburg 2003).

Following the Japanese attack, the military rushed reinforcements to the islands. Within a month of the attack, two military convoys of 16 ships arrived from the west coast of the U.S. mainland, carrying 15,000

troops in two infantry regiments, one regiment each of field and coast artillery, and light tank, signal, and railway battalions.

Construction during the initial phase of the war focused on defensive facilities, including a build-up of coastal defenses. Four new permanent batteries for 8-inch guns were constructed on O‘ahu. Ammunition storage facilities were expanded, with construction of new storage tunnels in Waikakalaua Gulch and in two areas of Kīpapa Gulch (the present Waikakalaua and Kīpapa facilities). A major, top secret project was called the “Hole” (the present Kunia Field Station), a three-story structure intended for aircraft repair and assembly, with the capability to handle B-17 heavy bombers. Access to the air-conditioned complex was through a quarter-mile long tunnel. A runway in the nearby Wai‘eli Gulch (on the present Wheeler Army Airfield) was constructed to service the planes coming out of this plant.

Construction during the initial phase of the war focused on defensive facilities, including a build-up of coastal defenses. This buildup of defensive facilities included the construction of Saddle Road. Another critical component in logistical planning was dealing with the large numbers of civilian workers who came to Hawai‘i during the war. Military construction projects required more workers than were locally available and more contractors were introduced to the Islands (Allen 1950).

In 1942, U.S. victory at the battle of Midway altered the role of Hawai‘i from a defense position to “a springboard for the Pacific offensive” (Allen 1950). Troops poured into the islands en route to the western Pacific, and were housed in barracks and makeshift camps throughout the islands.

There were 43,000 soldiers on O‘ahu on December 7, 1941, plus a handful on the other islands. In the first six months of the war, the total swelled to 135,000. By June of 1945, when plans were mounting for an offensive against the homeland of Japan, troops on O‘ahu alone numbered 253,000.

Jungle training and coordinated Army-Navy amphibious landings were practiced in anticipation of the island-hopping battle strategy of the western Pacific. Areas on O‘ahu that had been taken over by the military at the onset of war were developed as training areas.

The year 1943 saw preparations for the first full-scale offensive in the Central Pacific, the attack on Tarawa in the Gilbert Islands. Training for the Tarawa assault took place in all areas on O‘ahu, including Mākua and Pōka‘ī in Wai‘anae Bay (the present Mākua and Pīlilā‘au Army Recreation Center respectively) where troops practiced amphibious assault techniques. After a costly victory over the Japanese at Tarawa Atoll, members of the U.S. Marine Corps 2nd Division were sent to a training camp just outside of Waimea on Hawai‘i to recover and train. When they arrived, the camp was still incomplete. The Marines took it upon themselves to finish it and later named it Camp Tarawa. In the two years of its existence (1943-1945), thousands of Marines trained and recuperated at the camp including the 5th Marine Division who fought the Battle of Iwo Jima in 1945 (Bergin 2004, Langlas et al. 1997).

In late 1944 and early 1945, as American forces moved closer to Japan, military headquarters shifted west as well (Allen 1950). In November 1944, the Army’s 7th Air Force moved to Saipan, leaving only a wing to defend Hawai‘i. Two months later, the Navy’s Commander-in-Chief, Pacific Ocean Areas (CINCPAC), moved his headquarters from Pearl Harbor to Guam.

Even as late as 1944, however, military construction was still actively underway and being carried out under extremely tight schedules. A prime example is the Pineapple Pentagon (Buildings T-100, T-101, and T-103) at Fort Shafter. These buildings were the nerve center of logistical planning for subsequent Pacific operations.

Wartime development at Hawai‘i installations saw intensive new construction. Buildings were expanded and remodeled to meet intensified wartime needs. Development also focused on infrastructure. Using Federal funds, Nimitz Highway was built to relieve the traffic load on the old road to Pearl Harbor.

One of the more notable and significant events in the developmental history of Army installations on O‘ahu during World War II was the initiation of the construction of Tripler Army Medical Center in 1942, which would not come to its conclusion until the post war year of 1948. The new Tripler Army Medical Center, at its current location, was commissioned by Lt. General Robert C. Richardson Jr., Commander of the Pacific Ocean Areas from 1943-1946. The complex was designed by the New York City based architectural firm of York & Sawyer and by the O‘ahu based landscape architect Robert O. Thompson. Robert O. Thompson is a famous Hawaiian architect who also planned NHPA eligible properties such as Doris Duke’s Shangri La, the Hawai‘i Governor’s mansion Washington Place, Punchbowl Cemetery of the Pacific, and Building 330 of the Hawai‘i Ordnance Depot.

The Post-World War II Years (1946-1989)

World War II ended with the Japanese surrender on September 2, 1945. As had occurred following World War I, the Army went quickly from full wartime mobilization to demobilization and severe cutbacks in funding. Changes in military technology, particularly related to the development of nuclear weapons, required a re-thinking of military strategies and organizations. Much of the lands that the Army had acquired in 1941 were no longer needed, and several posts were considered for closure. In 1948, seacoast artillery was declared obsolete and all guns in the United States, including those at coastal defenses in Hawai‘i, were scrapped. Wheeler Field was also declared obsolete, and its runways too short to handle new jet-powered aircraft. In 1949, funding restrictions placed many Army installations on stand-by status, with Army activities in Hawai‘i limited primarily to the major posts on O‘ahu (Allen 1950).

On July 25, 1950, the U.S. became involved in the Korean War. All military resources in the Hawaiian Islands, including those like Wheeler Field that had been put in caretaker status, were placed on full alert. As in World War II, Hawaiian posts were used for training replacement troops. In 1951, the Hawaiian Infantry Training Center was established at Schofield Barracks (Belt Collins Hawaii with Mason Architects/International Archaeological Research Institute 2000a). In 1953, the conflict ended with the signing of an armistice that restored pre-war conditions on the Korean peninsula.

When the 25th Infantry Division returned to Schofield Barracks from Korea in 1954, the installation once again became an active post. The influx of troops and their families, however, put a strain on housing. The Army dramatically increased family housing by transforming virtually the entire western portion of the Schofield Barracks cantonment from athletic fields, open space, and training areas into new housing. Wheeler Field was brought back into active duty to accommodate the 25th Division air operations (helicopters and fixed wing aircraft) that had become essential in support of ground combat troops.

An immediate side effect of the housing development at Schofield Barracks was the loss of training areas, which the Army addressed by acquiring lands elsewhere on the islands. In 1956, 240 acres of former Kahuku Plantation lands were acquired for the Kahuku Training Area; subsequent leases expanded the original training area to over 9,600 acres (Williams and Patolo 1998a).

Cold War-related developments on O‘ahu included construction of Nike Hercules batteries and a satellite tracking station (Thompson c. 1982). The Hercules, which was a surface-to-air missile developed for defense against airplanes, had just become operational in 1959 and was being installed in a nationwide defense system. Four batteries were constructed on O‘ahu including: a single battery in the vicinity of Dillingham Field and a single battery at the northern end of the Ko‘olau Range in the Kahuku Training Area; two sets of dual batteries were built at Bellows Air Force Station and above Fort Barrette on the ‘Ewa Plain. In 1958, a satellite tracking station was built for the Air Force on the ridge above Ka‘ena Point. Development of the tracking station coincided with the Soviet launching of the Sputnik satellite on October 4, 1957, identified as the beginning of the “Space Race.” Less than four months later, the United States launched its first satellite into orbit, the Army-developed Explorer 1.

Army Reorganization

The Army reorganized several times following World War II. In 1947, the Department of Defense was created as a unifying umbrella organization for the armed forces. At the same time, the U.S. Air Force was established and was seen as the primary service that would be capable of delivering nuclear weapons; the Army was assigned responsibilities for “conducting land warfare, providing troops for occupation duty, and providing for air defense units” (U.S. Army Environmental Center 1998).

In 1952, the Armed Forces Reserve Act placed the Army Reserve as a distinct entity within the Army structure. In 1955, the Army activated the Continental Army Command (CONARC). Commands were divided among subordinate numbered armies that were organized geographically. Most of the CONARC installations focused on manning or training Army forces for ready deployment anywhere in the world.

In 1962, the Army underwent a significant reorganization. The technical services were abolished and their functions assigned to new agencies (U.S. Army Environmental Center 1998). The most important of these agencies was the Army Materiel Command, which reorganized the logistical functions of the technical services along functional lines. Other commands included the Army Air Defense Command, Strategic Communications Command, and Military Traffic and Terminal Service.

In 1973, the Army carried out further reorganization. CONARC and the Combat Developments Command was replaced by Forces Command (FORSCOM) and Training and Doctrine Command (TRADOC), both commanded by four-star generals (U.S. Army Environmental Center 1998). The Army placed a renewed emphasis on training in creating TRADOC, which assumed responsibility for all Army branch schools, as well as all training organizations. FORSCOM was responsible for fighting units and the supporting structure that function within a theater of operations; and U.S. Army Pacific (USARPAC) was formed as a comparable command with authority in Alaska, Hawai‘i, and the Pacific islands.

3. CULTURAL RESOURCES OVERVIEW

3.1. Categories of Cultural Resources at USAG-HI

This section details the categories of cultural resources as defined in legal authorities, and the responsibilities set out in those authorities. AR 200-1 acknowledges multiple sources of legal responsibilities that define cultural resources, including the following:

- **Historic properties** as established by NHPA
- **Archeological resources** as defined by ARPA
- **Sacred sites** as defined in EO 13007 to which access is afforded under AIRFA
- **Archeological Collections and associated records** as defined in 36 CFR §79
- **Cultural Items** as defined in NAGPRA

The laws place different (though often similar) responsibilities upon federal agencies with respect to each type of cultural resource. USAG-HI is responsible for carrying out the requirements of all of these laws for the Army in Hawai'i, and the Garrison Commander is the federal agency official as defined in each law per AR 200-1. A single property may simultaneously qualify as a cultural resource under multiple authorities. As an example, an archaeological site may be simultaneously a historic property under NHPA, an archaeological resource under ARPA, a sacred site under AIRFA, and contain cultural items as defined by NAGPRA.

Historic property, as defined by NHPA (54 U.S.C. § 300101 et seq), is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP), as maintained by the Secretary of the Interior. This term also includes artifacts, records, and remains that are related to, and located within, such properties. The term includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian Organization that also satisfies National Register criteria (Department of the Army 2007).²

As per 36 CFR §60.3 buildings, districts, objects, sites, and structures are defined as follows:

- **Building.** A building is created principally to shelter any form of human activity, such as a house, barn, church, hotel, or similar construction. Building may also be used to refer to a historically related complex such as a courthouse and jail, or a house and barn.
- **District.** A district is a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.
- **Object.** An object is a material thing of functional, aesthetic, cultural, historical or scientific value that may be, by nature or design, movable yet related to a specific setting or environment.
- **Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself maintains historical or archeological value regardless of the value of any existing structure.
- **Structure.** The term structure is used to distinguish from buildings those constructions made usually for purposes other than human shelter, such as a bridge, tunnel, earthworks, railroad grade, or similar construction. A structure may also be an engineering project large in scale.

² The reader should be aware that the definition of "historic property" in the law of the State of Hawai'i is similar but a bit different from the definition in NHPA. In some situations the difference can lead to unintended confusion.

Archaeological resource, as defined by Section 3(1) of ARPA (16 U.S.C. 470bb[1]), includes “Any material remains of human life or activities that are at least 100 years old and that are of archaeological interest.” Archaeological resources as defined by ARPA may also be cultural resources with independent protections from other laws such as the NHPA or NAGPRA. An archaeological site may well qualify as a cultural resource because it contains archaeological resources of interest, but still not qualify for the NRHP as an historic property. In such cases, the site may be protected from unauthorized removal of artifacts, but not be afforded consideration when in the path of proposed construction.

Sacred site is defined in Executive Order 13007 as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site." This Executive Order envisions discrete locations on federal lands identified by authoritative representatives as sacred by virtue of established religious significance or ceremonial use, rather than addressing a generalized sense of sacredness throughout the landscape. Also, AIRFA (42 USC §1996) protects access to, and use of, these sites by those practicing a traditional religion, to the extent practicable, and not clearly inconsistent with the military mission.

Archaeological collections and associated records, as defined under 36 CFR §79: Curation of Federally Owned and Administered Archaeological Collections, include collections of material remains, such as artifacts, objects, specimens, and other physical evidence, that are excavated or removed during a survey, excavation, or other study of a prehistoric or historic resource. The regulations at 36 CFR §79 specify in detail the levels of care an agency must continue to provide for these permanent collections. ARPA clearly designates archaeological collections and the associated records as subject to continuing stewardship responsibilities by federal agencies. The regulations incorporate responsibilities for long term care of archaeological collections derived from other statutes as well.

Cultural Items. According to Section 2(3) of NAGPRA (25 U.S.C. 3001[3]), cultural items include human remains, associated and unassociated funerary remains, sacred objects, and objects of cultural patrimony. These types of cultural items can, and often are, found within archaeological sites. NAGPRA outlines a specific process to determine ownership of NAGPRA cultural items that are presently in the possession of, or under the control of, museums and Federal agencies, but ultimately NAGPRA cultural items belong to the closest culturally affiliated lineal descendant(s).

National Historic Landmark (NHL), as defined by 36 CFR §65.3(h), is a district, site, building, structure, or object possessing national significance in American history, archeology, architecture, engineering, or culture. The Secretary of the Interior designates an NHL under authority from the Historic Sites Act of 1935. When the Secretary of the Interior designates an NHL, it is automatically also considered to be a historic property for purposes of the NHPA and listed on the National Register of Historic Places as of the date of its NHL designation.

Historic Status Codes

In accordance with EO 13287, the Department of the Army maintains data and information systems on federal real property that includes cultural resource data fields for historic real property assets. The DoD has adopted the following Historic Status Codes which are attributes of the official Department of the Army Real Property database of record. Each assigned code should be substantiated by documents

coordinated with State Historic Preservation Office or the National Park Service with respect to the current status of each facility with respect to the NRHP and criteria of eligibility.

NHLI	Individual National Historic Landmark	A facility that is individually listed on the NRHP and has further been declared to be a NHL by the Secretary of the Interior due to its prominent importance in our Nation’s history.
NRLI	Individual National Register Listed	A facility that has been individually determined to meet the NRHP criteria of eligibility, and has been formally listed in the NRHP by the Keeper of the National Register.
NREI	Individual National Register Eligible	A facility that is individually determined to meet the NRHP criteria of eligibility, but had not gone through the formal nomination process.
NCE	Non-Contributing Element of a NHL or NRHP District	Facilities within the designated boundaries of a NHL District or NRHP-listed or NRHP-eligible district that have been evaluated and determined not to contribute to the historic or architectural significance of the district.
DNE	Determined Not Eligible for Listing	A facility that has been evaluated using the NRHP criteria and is determined not to meet any of the requirements for eligibility.
DNR	Designation Rescinded	A facility formerly classified as NHLI/NHLC/NREI/NREC which has been determined by the Keeper to lack integrity to remain a historic property. The formal removal process of NREI/NREC properties involves the review, approval, and signature of the FPO and the SHPO.
NHLC	Contributing Element of a NHL District	An individual facility that is identified as a contributing element of a district listed on the NRHP and also designated a NHL district by the Secretary of the Interior.
NRLC	Contributing Element of a NRHP Listed Historic District	An individual facility that is identified as a contributing element of a larger historic district formally listed on the NRHP.
NREC	Contributing Element of a NRHP Eligible Historic District	An individual facility that is identified as a contributing element of a larger district determined eligible for listing on the NRHP.
ELPA	Eligible for the purposes of a Program Alternative	An individual facility that is treated as eligible for listing in the NRHP by consensus of the Federal Preservation Officer, State Historic Preservation Officer and Advisory Council on Historic Preservation during the development of a program alternative as defined in 36 CFR 800.14. Examples include Capeheart-Wherry Housing, Cold War era Unaccompanied Personnel Housing, and World War II and Cold War era Ammo Storage Facilities.
NEV	Not Yet Evaluated	A facility that has not yet been evaluated for historic status.

3.2. General Overview of Cultural Resources Inventory at USAG-HI

USAG-HI has direct responsibility for cultural resources within the Army jurisdiction on O‘ahu, and also provides support for management of historic buildings and districts within Army jurisdiction on the island of Hawai‘i.

All of the types of historic properties discussed in Section 3.1 are found on Army installations on O‘ahu Island (see Appendix D for USAG-HI Inventory). Historic properties at USAG-HI include sites, buildings, structures, and objects. Archaeological sites, both those that are historic properties and archaeological resources as defined in ARPA, include habitation sites, heiau structures, resource procurement sites, trails, animal control features, shrines, and former fishponds deliberately filled. The sites date to the pre-contact Hawaiian period as well as the post-Contact period during which Hawaiian culture was changing with the influence of Western culture and other contacts. There are also archaeological sites and structures related to historic-era ranching, railroads, and plantation agriculture in many sub-installations within USAG-HI.

Archaeological Sites. The inventory of archaeological sites on O‘ahu Army installations includes 1,040 archaeological sites with descriptive documentation on file. Of these, 75 are listed on the NRHP or have been formally determined eligible with concurring opinion from SHPD. Another 194 have been determined NOT eligible for the NRHP, with over 770 still in need of a formal evaluation. It is Army policy (AR 200-1: 6-4(9)) to treat known but unevaluated properties *as if* eligible until a formal evaluation is made.

Generally, sites with Traditional Hawaiian associations are relatively infrequent within the developed cantonment areas, but more frequent in training areas. An exception to the general pattern would be those developed recreational and other sub-installations where there is still a high likelihood of finding currently undocumented but important sub-surface archaeological sites and features, especially in sandy soils near the beaches.

Within military training areas, there is often a difference of frequency and integrity between archaeological sites in heavily used areas as compared to relatively sheltered areas. As an example, upland plateau areas of Schofield Barracks training areas have a use-history of intensive sandalwood harvest, ranching, plantation agriculture, followed by military maneuver training and other training actions. Areas with this land-use history show the effects of continuing erosion over many decades. This has left many archaeological sites in those exposed areas either eroded away, or severely deflated. In contrast, within the gulches of those training areas where the maneuver training and other uses were less intensive, there is a higher likelihood of intact archaeological sites or features, and often in much better overall condition.

Sacred Sites. No sacred sites, as defined by AIRFA and EO 13007, have been designated at any of the installations on O‘ahu Island as of November 2016.

Historic Buildings, Structures, and Objects. USAG-HI manages approximately 6,400 buildings, structures, and objects on O‘ahu, and provides the expertise of qualified architectural historians toward the management of another 400 buildings at USAG-Pōhakuloa directly, and the nearly 100 buildings and structures contributing to the character of the Kilauea Military Camp on the island of Hawaii.³ Of the buildings, structures, and objects on O‘ahu, 772 have a historic status on record, and another 412 of them

³ Note: NPS claims 103 contributing resources, 42 non-contributing, and 2 “undetermined” within the KMC district. These numbers do not match Army real property records that show 79 contributing or eligible, 42 non-contributing, and 2 yet to be evaluated.

are of sufficient age to receive a formal evaluation but have not yet had an evaluation as to historic significance. The identified historic buildings span construction dates from 1901 through 1967.

Historic Districts. USAG-HI manages six defined historic districts on O’ahu. It also supports management of buildings within the historic district of Kilauea Military Camp on Hawai’i Island. Districts are:

National Historic Landmark Districts (Listed)			
	Name	Place	Date Listed
	Palm Circle NHL District	Fort Shafter	28 May 1987 ⁴
	Wheeler Field NHL District	Wheeler Army Air Field	28 May 1987
National Register Historic Districts (Listed)			
	Name	Place	Date Listed
	Schofield Barracks Historic District	Schofield Barracks Cantonment	31 July 1998
Historic Districts Considered Eligible (not listed)			
	Name	Place	Date Concurred
	Wheeler Field Historic District additions	Wheeler Army Airfield	9 Oct 2010
	Hawaii Ordnance Depot Historic District	Fort Shafter	13 Apr 2010
	Tripler Army Medical Center	Tripler Army Medical Center	25 May 2005
Historic Districts on Hawai’i Island supported by USAG-HI			
	Name	Place	Date Concurred
	Kilauea Military Camp	Volcanoes National Park, HI	8 Oct 1996

Table 2: Historic Districts Summary Table

Curation Facility. USAG-HI operates a curation facility, located within Schofield Barracks, through a cooperative agreement with the Research Corporation, University of Hawaii. The care and conservation of artifacts and historical documents in accordance with *36 CFR Part 79: Curation of Federally Owned and Administered Archaeological Collections* is the responsibility of the Garrison Commander, assisted by the curator assigned to the Schofield Barracks Curation Facility housed within the historic Schofield Fire House. The collection includes both the physical items recovered through archaeological investigations on lands within Army jurisdiction and the associated records and information related to them. The information management is extremely important for preserving the value of the collection for future research and for interpretation or educational uses (See Appendix B for *Cultural Resources Material Remains and Associated Records Curation Standards*). USAG-HI completed NAGPRA inventories and repatriation of cultural items from the collections.

⁴ Prior to the NHL listing, Palm Circle was first listed as a district in the National Register of Historic Places on October 26, 1984. There are some minor differences between the original NRHP listing and the NHL listing.

Cultural Items.

Burial Features in archaeological sites

Some of the archaeological sites have confirmed burial features of Native Hawaiian origin, *iwi kupuna*, within them. These known burial features are cultural items as defined by NAGPRA. Any planned disturbance of these features would require prior compliance with the provisions of NAGPRA, and any inadvertent disturbance would require compliance with the NAGPRA provisions for inadvertent discovery. The precise location of known burial features is considered sensitive information not generally shared publicly.

Re-burial features in situ or near situ

Some past undertakings have discovered or disturbed burial features, *iwi kupuna*, with consultations for treatment resulting in re-interments at or near the original places of discovery. The precise locations of these re-burials are considered sensitive information not generally shared publicly. In some cases, the precise location of these re-interments is not well documented in older archaeological monitoring reports made at the time of the re-interments.

Re-burial crypts

There are three constructed crypts, at Fort Shafter, Fort DeRussy, and Piliā'au Army Recreation Center, in which *iwi kupuna* have been reinterred after consultations. The precise locations of two of these (Fort Shafter and Fort DeRussy) are not generally shared publicly in accordance with commitments made during consultations. The crypt at PARC is in a prominent location and it has memorial markers and signs explaining its significance.

Informational challenges

The cultural resources inventory at USAG-HI, while generally well ordered, has some aspects that need attention and improvement during the course of the next planning cycle. Analysis of available inventory information during the development of this document revealed some circumstances with respect to inventory that impede good cultural resources management and which can be improved during the ICRMP implementation cycle.

1. A large percentage of possible historic properties, both archaeological sites and buildings, are unevaluated. Since the Army regulations require treating unevaluated properties as if eligible, the unevaluated status of these properties may be resulting in diversion of staff time and Garrison fiscal resources to accommodate these properties during the planning and implementation of undertakings.
2. The Historic Status codes for many properties have apparent discrepancies that reflect a need for a thorough re-examination and revalidation of these codes. This is true for the real properties, but particularly true for the inventory of archaeological sites. The overview analysis noted, for example, a series of real properties with the code of "NREC" (appropriate to a contributing property within a historic district), but in an area for which there is no historic district on record. USAG-HI should systematically review the inventory for apparent inconsistencies in code attributes and correct records as appropriate.
3. The current archaeological site inventory for O'ahu has been assembled from several partial and fragmentary lists, each of which was inconsistently researched in terms of primary sources and subsequent correspondence with the SHPD. The site numbering protocols at SHPD have changed over time, so many older lists may have designations not matching current lists. The labels

recording the NRHP status of the sites within the inventory list do not consistently use the current historic status codes. Inspection of other attribute labels also show apparent discrepancies and inconsistencies.

4. For the archaeological site inventory, there is an apparent need to re-validate the reported site locations, adequacy of current site descriptions, and attributed site types, especially for sites documented in older archaeological survey reports.
5. For all classes of cultural resources, the DPW GIS under development within the Planning Division offers the best long-term prospect for sharing cultural resources inventory information quickly and reliably with planners and project proponents. A well-developed GIS application should be a primary method for integrating cultural resources inventory information with other Garrison plans. It will also support production of more informative maps for communications with consulting parties.

Appendix D has a list of known archaeological sites within each sub-installation, a list of buildings and structures with any of the positive historic status codes, and a list of buildings and structures that are 50 years of age or older, but still not evaluated. These lists are the best available as of December 2016. The inventory information frequently changes as new areas are surveyed, sites or buildings are evaluated, or as corrections are made with new information in hand. Proponents planning new undertakings are strongly advised to confer with the Cultural Resources Section for current information rather than rely solely on the lists in the Appendix.

3.3. Cultural Resources Issues of Note at USAG-HI

The specific combination of cultural resources, history, and cultural traditions tied to cultural resources gives USAG-HI a suite of cultural resources management challenges of distinctive character as compared to those of other, similar sized Army Garrisons.

Inventory Information Improvement

Inventory information regarding cultural resources at USAG-HI faces several challenging circumstances. USAG-HI needs to update its inventory records regarding cultural resources to accommodate quick and accurate communications with project planners and proponents, Department of the Army, DoD, and SHPD.

USAG-HI division into multiple sub-installations has encouraged variability in the quality of inventory information among the different sub-installations. Older archaeological survey reports do not provide the same level of documentation as more recent ones. The re-organization of existing inventory information and validation of information consistent with the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) is a priority need for the program.

Evaluation of Buildings and Archaeological Sites

USAG-HI has a large number of buildings that are 50 years old or older but not yet evaluated with respect to the NRHP. By policy stated in AR 200-1, USAG-HI must treat all of these unevaluated buildings and structures *as if* they are eligible for the NRHP until evaluations can be completed to properly document the appropriate historic status code. If evaluated properly, many of these buildings and structures will likely be determined ineligible for listing. USAG-HI needs to evaluate buildings and structures over 50-years of age with a current NRHP Historic Status Code of NEV (Not Yet Evaluated) in order to better focus preservation maintenance efforts and management on those properties actually eligible for listing.

There are also many archaeological sites not yet evaluated as to eligibility for the NRHP. USAG-HI needs to evaluate these and focus preservation and cultural access efforts on those archaeological sites and features determined to be eligible for listing.

Programmatic Agreements and Plans of Action

Plans of Action or Comprehensive Agreements under NAGPRA could bring consistency and order into future occurrences of both inadvertent discoveries or disturbances of burial features, *iwi kupuna*, during planned activities.

Programmatic Agreements under NHPA can provide a customized Section 106 compliance process for routine activities. A programmatic agreement for considering effects and treatment of historic buildings and structures in the cantonment areas could reduce the paperwork between USAG-HI and external agencies, but still provide appropriate preservation outcomes for the historic properties.

Native Hawaiian Consultation

The USAG-HI controls more lands than any other military department in Hawai'i, encompassing a much greater diversity of circumstances, cultural resources, and cultural resources issues. Consultations with NHOs require sustained on-going attention and relationship building. USAG-HI will have many separate projects at different stages of consultation at all times and may receive conflicting opinions and advice from different NHOs. Adequate and effective consultations with NHOs are of crucial importance to successful support of the mission at USAG-HI.

3.4. Cultural Resources Inventory by Sub-Installation

Āliamanu Military Reservation (AMR)

Primary Functions: Housing for military families at Āliamanu is managed by Island Palm Communities, LLC.

History: Āliamanu figures in Hawaiian mythology as the place, along with Āliapaʻakai crater, where Pele tried to make a home for herself on Oʻahu after leaving Kauaʻi. Geographically, the land was part of the family holdings of the Aliʻi until the mid-nineteenth century, after which Āliamanu crater was part of lands held by members of the royal family and leased for agricultural use.

AMR originated as Red Hill Military Reservation, set aside by presidential executive order shortly after Hawaiian annexation in 1898 (Thompson c. 1982). Around 1913, infantry earthworks were established on the slopes of the extinct volcanic crater. In 1928, the Hawaiian Ordnance Depot took control of the area “as an ideal location for magazine tunnels for the centralized storage of Army ammunition” (Thompson c. 1982). The Āliamanu Ammunition Storage Depot was constructed c. 1937-1937 and supported 43 tunnel magazines built into the side of the Āliamanu Crater.

In October 1941, work was started to convert one of the ordnance storage tunnels in the rim of Āliamanu crater into a joint Army-Navy command post, which was rushed to completion after the Japanese attack. Top Army and Navy officials of the island defense forces operated out of this headquarters for several months (Allen 1950).

In the 1970s, AMR was converted into a major joint services housing development (Thompson ca 1982). The Army transferred the stored ammunition to the Navy Lualualei storage depot and the ammunition tunnels at Āliamanu were sealed. The crater became a 2,600 unit residential complex, the “largest family housing development ever attempted by the Corps of Engineers” (Thompson c. 1982).

Cultural Resources Overview: A Heiau and burial terrace known as “Salt Lake Heiau” or as “Puʻu Kapu Heiau” (site 50-80-13-0088) is located on the eastern rim, and is partially obscured by a communications facility and transmitter tower. The programmatic agreement for privatizing army family housing (see ICRMP Section 6.4) includes a stipulation for maintaining an open buffer around the Heiau. Subsequent archaeological surveys have discovered no other tangible archaeological sites within AMR (McAllister 1933, Takemoto and Joerger 1975, Kamakau 1964, MaCrae 1922).

AMR has 119 buildings and structures over 50 years old in need of evaluation (RPLANS December 2016). The underground tunnels and bunkers are also in need evaluation within the context of other underground military structures.

Dillingham Military Reservation (DMR)

Primary Function: DMR now consists of three training areas, a private-use/owned cantonment area, a joint use civilian/military airfield, and three airborne drop zones. Portions of the reservation, including the runway and parking area, have been leased to the Hawaiʻi Department of Transportation (HDOT) since 1983 for civilian light aircraft operations and support. DMR is used for small unit (platoon and squad) maneuvers and combat support operations. DMR is used primarily for aviation operations, logistic support and mission command operations, command and logistic support area operations, emergency deployment readiness exercise (EDRE) support operations, limited platoon and squad maneuver training, lodgment support operations, and night vision goggle training (i.e., night flying) for helicopter pilots.

History: In the 1800s, the area now in Dillingham Military Reservation was part of the Dillingham Ranch. The Kawaihāpai Military Reservation, as DMR was first named, was established by a Presidential Executive

Order in June of 1927. Although it was military property, it was primarily used for agriculture, housing, and campsites before WWII. Mokolē'ia Airfield, a small grass and sand landing strip, was located next to the reservation. As part of the WWII-era buildup, the grass landing strip was quickly expanded to an 8,000-foot long asphalt runway, complemented by roadways, bunkers, revetments, ammunition storage, and gun emplacements.

In 1948, the airfield became the property of the newly formed Air Force and renamed Dillingham Air Force Base. During this period, it was mainly used for defense exercises, a dispersal and recovery base for emergency war operations, and for military training purposes. During the 1960s, parts of DMR were developed as a Nike-Hercules battery.

Cultural Resources Overview: Identified archaeological sites at DMR consist of abandoned concrete buildings, a manhole, a terrace complex, a heiau structure, and an agricultural complex (McAllister 1933, Takemoto and Joerger 1975, Rosendahl 1977, Moblo 1991, McGerty and Spear 2001, Kamakau 1964, Handy 1940, McGerty and Spear 1997, MaCrae 1922, McGerty and Spear 2009, McGerty and O'Rourke 2010). Sites determined to be eligible for listing include the Kawailoa heiau (site 50-80-03-0191) and the Kealia-Kawaihapai Complex (site 50-80-03-0416), 13 sites are determined to be not eligible for listing, with the remaining 22 sites yet to be evaluated.

DMR has 6 buildings and structures over 50 years old in need of evaluation (RPLANS December 2016).

Field Station Kunia (FSK)

Primary Functions: Today Field Station Kunia (FSK) contains both aboveground and underground buildings used for administrative, communications, storage, and recreation. FSK serves as a tri-services communications complex (U.S. Army Environmental Command 2013a).

History: In the late 1930s, Army construction was accelerated due to the threats from Germany and Japan. "The Hole" (now Field Station Kunia), was constructed in 1943-44 and originally intended for plane assembly with a runway connection to Wheeler Field to the east. Since it was not needed for such use, it proved ideal for the reproduction of maps and charts. Its huge air conditioning and ventilating systems provided easy control of temperature and humidity, and its fluorescent lighting furnished a flood of shadowless illumination. In 1981, FSK was transferred to the Army and converted into a communications facility providing rapid and secure radio relay communications for defense (U.S. Army Environmental Command 2013a).

Cultural Resources Overview: There are no known archaeological resources or sites within this sub-installation (Department of the Navy 1998). A 1998 reconnaissance survey by the Naval Facilities Engineering Command found no evidence of significant archaeological resources. Any potential sites would have been disturbed from previous construction and pineapple cultivation activities (Department of the Navy 1998).

FSK contains 6 buildings and structures over 50 years old. Building 9 is the only facility determined eligible for the NRHP by the Naval Facilities Engineering Command in 1998 (Department of the Navy 1998). Other FSK facilities were determined to be not eligible for listing (Department of the Navy 1998).

- Building 9 was built between 1941 and 1944. The building was a bombproof, three-story underground air depot, camouflaged under a berm of earth and pineapple fields. Building 9 was determined eligible under Criterion A for bombing and intelligence gathering missions and activities during WWII, which helped end the war. Building 9 is also eligible under Criterion C for its method and purpose of construction (Department of the Navy 1998).

Fort DeRussy Military Reservation (FDR)

Primary Functions: Principal activities at FDR include the following: the 9th U.S. Army Reserve Command headquarters and facilities; the Daniel K. Inouye Asia-Pacific Center for Security Studies; the U.S. Army Museum, Hawai'i (located in the historic Battery Randolph); the U.S. Army Corps of Engineers Regional Visitor's Center (also in the historic Battery Randolph); and the Hale Koa Hotel managed by the Armed Forces Recreation Center. Fort DeRussy is an open post with park areas, tennis courts, a volley ball court, picnic area, and beachfront for both military and civilian use.

History: At the time of western contact, the center of power on the island of O'ahu was in Waikiki, where the ruling island chief Peleioholani maintained his primary court and major temples. The broad plain from the Waikiki coast to the Ko'olau valleys was developed for irrigation agriculture. In the area now known as Fort DeRussy, there were numerous fishponds.

Fort DeRussy was established in 1909 as part of the Headquarters Coast Defenses of O'ahu to protect Honolulu and Pearl Harbor.⁵ It was used as the Camouflage School and the U.S. Armed Forces Institute in the post-WWII and WWII era. Maluhia Hall was constructed in 1943 as a center for recreational and social activities (demolished in 1998). Fort DeRussy supported several canons and anti-aircraft guns near the shore until the Coastal Artillery was disbanded in 1950 and FDR was designated as an Armed Forces Recreation Area. The central section of FDR has an open park area and pays tribute to the branches of the U.S. Armed Services (Pacific Cooperative Studies Unit University of Hawai'i 2010).

The Hale Koa, a resort hotel for military recreation, was established in 1975. During the renovations to the Hotel in ca. 1991, burials were uncovered, removed, and determined to be Native Hawaiian. After consultation with Native Hawaiians, these human remains were reburied in a special site on the grounds.

Cultural Resources Overview: Identified archaeological sites at FDR include royal fishponds, 'auwai (canal) complex, and burial sites (Davis 1989, BioSystems Analysis Inc. 1994, Elmore and Kennedy 2002, Rasmussen 2005, Walden and al. 2010). Of the known sites, one is determined eligible for listing, 4 sites were determined to be not eligible for listing, and the remaining 9 are yet to be evaluated. There is also a reinterred burial at FDR as well as a Burial Crypt. Information as to the specific location of the burial and crypt is restricted from public dissemination.

FDR contains 3 buildings and structures over 50 years old requiring evaluation (RPLANS December 2016). Battery Randolph is listed in the NRHP.

- Battery Randolph was built circa 1909. It was individually listed in the NRHP in 1984, along with six other Batteries, as part of the Artillery District of Honolulu Multiple Property (Char 1983).

An Archaeological Collection Summary for Fort DeRussy, Hawai'i: Information Provided for Compliance with the Native American Graves Protection and Repatriation Act Section 6 Summary was completed in 1996 (U.S. Army Corps of Engineers 1996a). According to the report, an inadvertent discovery of human remains of six individuals was reported in 1976 during a construction project and the remains were reburied on Fort DeRussy (Davis 1992, Rosendahl 1977). Human remains of two individuals were also discovered in 1991 and 1992 and left *in situ*. In 1993, during archaeological monitoring of subsurface utility excavations, between 39 and 52 individuals were discovered (Carlson et al. 1995, Davis 1992, Rosendahl 1977, Simons et al. 1995); 11 of which were left in situ, one was reinterred on site, and the rest were "exhumed and reinterred in a crypt on Fort DeRussy" (U.S. Army Corps of Engineers 1996a). The

⁵ According to the National Register of Historic Places nomination form, Fort DeRussy was initially established as part of the "Artillery District of Honolulu" by WD GO No. 74 on 24 April 1909. This District was renamed the Headquarters Coast Defenses of O'ahu sometime between 1911 and 1913 (Char 1983).

Archaeological Collection Summary goes on to note that “The most common and widespread method of interment in ancient Hawai‘i was burial in sand dunes or in the earth, and occasionally in the caves located along the cliffs and terraces. Nearly all large dune deposits around the islands are known to contain large numbers of prehistoric burials. The burials themselves take a variety of forms, ranging from secondary bundle burials consisting of only a cranium and long bones, to primary flexed burials, to fully extended burials (Kirch 1985)” (U.S. Army Corps of Engineers 1996a).

Fort Shafter Military Reservation (FSMR)

Primary Functions: The primary role of Fort Shafter Military Reservation (FSMR) today is to support Army organizations that exercise primary command, control, and management of ground defense of the Pacific theater. These organizations include the headquarters of the U.S. Army, Pacific (USARPAC), the Installation Management Command—Pacific Region (IMCOM-PAC), U.S. Army Corps of Engineers, Pacific Ocean Division (CEPOD), U.S. Army Corps of Engineers, Honolulu Districts, and IX Army Reserve. Fort Shafter is also home to engineering, communications, military intelligence, and security units, along with elements of USAG-HI (Tomonari-Tuggle and Slocumb 2000).

History: Fort Shafter occupies lands from the traditional ahupua‘a of Kahauiki. In the late 1800s, James I. Dowsett had ranching interests on lands now occupied by Fort Shafter. The area became Federal land after the annexation of Hawai‘i by the United States in 1898. It was assigned to the War Department in 1899 and soon after was selected as the first U.S. Army post in Hawai‘i, initially named Kahauiki Military Reservation. The Army renamed it Fort Shafter in 1907 (Tomonari-Tuggle and Slocumb 2000). From 1907 to 1909, the initial battalion cantonment at Palm Circle and Post Hospital were developed. The original Palm Circle cantonment area was expanded in 1914-15 to provide a complete Regimental Post (U.S. Army Environmental Command 2015a).

By 1917, the Hawaiian Ordnance Depot (later designated as the Hawai‘i Arsenal Military Reservation) served as a separate post within Fort Shafter (U.S. Army Environmental Command 2015a). An entire complex of medical buildings was completed by 1919 (Tomonari-Tuggle and Slocumb 2000). In 1921, the Army shifted the headquarters for the Hawai‘i Department from the Alexander Young Hotel in Honolulu (which had been headquarters since 1911) to Fort Shafter. Fort Shafter then became home of the senior Army headquarters in the islands (Meeken 1974).

World War II brought a massive buildup of new facilities. At Fort Shafter the cohesive design and architecture of Palm Circle was modified by the construction of new structures, including the “Pineapple Pentagon,” the nerve center of logistical planning for Pacific operations late in the War. It was completed in 1944.

The Signal Corps used an area at Shafter Flats during World War II. The largest underground project for the aircraft warning system was the Air Defense Command Post (Building 1292) at Fort Shafter (Thompson c. 1982). Here, information from all fixed and mobile radars in the island was received and then relayed to all concerned command posts and required parties. The tunnels at Fort Shafter included a bombproof radio station, an underground cold storage facility, an anti-aircraft command radio transmitter tunnel, and the Air Defense Command Post (Tomonari-Tuggle and Slocumb 2000).

Cultural Resources Overview: FSMR contains archaeological sites from both traditional Hawaiian context and the historic era. These include rock shelters, Hawaiian fishponds (now buried under fill), heiau structures, a pack trail, and several military sites (Tomonari-Tuggle and Slocumb 2000). Of these sites, 1 is determined not eligible, with the remaining 29 sites in need of formal evaluation.

Fort Shafter has a reburial crypt where the Garrison reinterred human remains recovered from disturbed rockshelter sites within Fort Shafter. It was dedicated in a ceremony on December 11, 2003. Information as to the specific location of the crypt is restricted from public dissemination.

FSMR also includes several prominent historic buildings and structures. 113 of the buildings and structures have an active historic status (listed, eligible, or contributing to an eligible district), 8 are determined not eligible, and 85 buildings are 50 years old or older and in need of evaluation (RPLANS December 2016). Fort Shafter has two historic districts.

- Palm Circle is a National Historic Landmark District significant as the headquarters of the commanding general of US Army forces in the Pacific in World War II, and the site of planning for the invasions of the Marshalls, Guam, Okinawa and other islands from 1943-1945. The original nomination to the NRHP cited the original architecture and landscaping of the 1907-1909 period as well as several structures from the 1944-45 period. Stately rows of royal palms lining the parade grounds complement the buildings surrounding the open parade ground. Fifteen two-story, frame officers' quarters line the north and east sides of Palm Circle Drive, which encircles the parade grounds. Buildings on the southern side of the drive currently house administrative offices. These buildings are former enlisted men's barracks. Palm Circle NHL District includes 37 contributing elements (Thompson 1984). Palm Circle is also listed on the Hawai'i State Inventory of Historic Properties and the NRHP as a Historic District.⁶
- The Hawaiian Ordnance Depot Area is also identified as an eligible Historic District on the State Inventory of Historic Properties with 20 contributing elements.
- Richardson Theater is individually listed on the Hawai'i State Inventory of Historic Properties.

An Archaeological Collection Summary for Fort Shafter, Hawai'i: Information Provided for Compliance with the Native American Graves Protection and Repatriation Act Section 6 Summary was completed in 1996 (U.S. Army Corps of Engineers 1996b). According to the report, the remains of one human skeleton were discovered at Fort Shafter in 1983 and released to the Bishop Museum. No objects are known to be associated with these human remains. The Archaeological Collection Summary goes on to note that "The military reservation (Fort Shafter) was a burial ground extending as far as Pohaha and up inland to the home of one of the sons of the Honorable S.M. Damon" (Sterling and Summers 1978). Rosendahl (1977) also notes the potential for disguised burial caves in steel rocky faces of the more inland portions of gulches at Fort Shafter. It was a common native Hawaiian internment practice to place remains in lava tubes, rock shelters, or niches in steep cliffs. These could be either individual or group burials (Kirch 1985)" (U.S. Army Corps of Engineers 1996b).

Helemano Military Reservation (HMR)

Primary Functions: HMR functions principally as a military housing area for Army personnel at Schofield Barracks, and also serves as the headquarters for the Army's 125th Signal Battalion ("Voice of Lightning").

History: Hawaiian legend connects the Helemano area in general with the story of the cannibal chiefs of O'ahu, who supposedly lived in semi-exile at Helemano. In the eighteenth century, the area was withdrawn from cattle grazing and converted to pineapple cultivation. Helemano Military Reservation was initially established as a WWII era (1943) communications facility housing the Helemano Radio Receiving Station. Shortly after, additional family quarters were constructed at HMR (Thompson c. 1982). During

⁶ There are some minor differences in the number of contributing properties between the original NRHP listing and the NHL listing.

the Cold War it served as a major relay station in the Strategic Army Communications Network (STARCOM) (U.S. Army Environmental Center 1998).

Cultural Resources Overview: HMR was extensively developed during WWII and the postwar years, and subsequent archaeological surveys did not result in any identified sites (Rosendahl 1977, Fankhauser 1987, Cox and Zulick 2001).

HMR has 1 building considered eligible for the purposes of a Program Comment and 6 buildings over 50 years old in need of evaluation (RPLANS December 2016).

Kahuku Training Area (KTA)

Primary Function: KTA is currently the largest contiguous ground-maneuver training area on the island of O'ahu. KTA tactical maneuver training includes mountain and jungle warfare, pyrotechnics, and air support training. The training area is non-live fire with the exception of the use of short-range training ammunition (SRTA) at the KTA Combined Arms Collective Training Facility (CACTF) and Military Operations in Urban Terrain (MOUT) facility (Directorate of Public Works May 2016). KTA is composed of 9 sub-training areas, 5 active helicopter landing/pickup zones (LZs/PZs), and 2 parachute drop zones (Kanes and X-Strip).

KTA does not have a defined cantonment area, but does have a Range Control compound and three smaller compounds that are set aside to support Army-related operations. Road access to transport equipment and Soldiers to KTA is primarily via Drum Road from Helemano Military Reservation.

Non-military uses at KTA include hiking, biking, hunting, and motocross. The Hawai'i Motor Sports Association (HMA) leases 400 acres of state land (Waialea Motorcycle Track), allowing exclusive rights to Training Area A-1 during weekends and state and federal holidays. Likewise, hiking and biking are allowed on the 6-mile long Kaunala-West Trail during weekends and state and national holidays. Public hunting is also permitted in a portion of the Pupukea Paumalu Forest Reserve in KTA on weekends and state and federal holidays, unless access is restricted for military activities (U.S. Army Garrison, Hawaii 2016 (draft)).

History: Most of Kahuku Training Area was originally part of the Kahuku Sugar Plantation. In the 1930s and 1940s, numerous airfields were established throughout the islands and a subsidiary field was established at Kahuku in 1944 under a letter permit from the Territory of Hawai'i. Original facilities included temporary huts and mess facilities (temporary facilities demolished in 1956). In 1956, 240 acres of the Kahuku Plantation were acquired for the Kahuku Training Area; subsequent leases expanded that original training area to over 9,600 acres (Williams and Patolo 1998b).

In the late 1950s, the northern end of the Ko'olau Range part of KTA was selected as one of four sites on O'ahu for Nike anti-aircraft defensive missile launch sites. Construction of the Nike Hercules missile battery began in 1960, and was completed in January 1961. It was armed with a nuclear-capable Nike Hercules surface-to-air-missile (SAM) as a defense against potential attack by long range bombers. The facility was continuously operated until the closure of all four Nike sites on O'ahu in March 1970, when the entire Nike Program was closed down as part of the Strategic Arms Limitation Treaty (SALT) with the Soviet Union (Slocumb 2004). This area was formally merged with KTA in 1987.

Another significant site is the 'Ōpana Radar Station (site 50-80-02-9745). In December 1939, six mobile long-range radar units were established as part of an experimental Aircraft Warning System (AWS). On Thanksgiving Day in 1941, one of these mobile radar units was moved from Schofield Barracks to the 'Ōpana Radar Site in order to provide an unobstructed view of the Pacific Ocean. It was this mobile unit that first identified incoming Japanese planes on December 7, 1941. The 'Ōpana Mobile Radar Station is

both a National Historic Landmark (1994) and NRHP listed site (1991). This site is currently under the jurisdiction of the U.S. Navy though immediately adjacent to the Kahuku Training Area Lands.

Cultural Resources Overview: Identified archaeological sites at KTA include cooking hearths, habitations, an agricultural complex, and an upland garden. Several archaeological sites are also of post-contact and military origin, including a historic house site, irrigation features, bunkers, and concrete slabs (Burke, de Leeuw, and Hammatt 2013, Monahan 2009, Descantes, Orr, and Desilets 2009, Ogg, Farrell, and Dega 2012, Hawkins, Toney, and Wasson 2014, Patolo, Farrell, and Dega 2010, McGerty and Spear 2004, Robins 2012). Of these sites, 1 is NRHP-listed (Hanakoa Platform, site 50-80-02-2501, listed in 1973), 24 are determined eligible, 35 sites were determined not eligible for listing, and the remaining 122 sites are yet to be evaluated.

KTA includes several buildings and structures that are associated with WWII and Cold War eras. In total, KTA includes 23 facilities over 50 years old; 19 of which are contributing elements of an eligible Historic District, 3 of which are individually eligible for the NRHP (RPLANS December 2016), with 1 structure yet to be evaluated.

- The Nike Hercules missile battery (OA-17) is located on the northern end of the Koʻolau Range. A 2004 HAER report found the Kahuku Nike Missile Site to be the most significant, intact Nike missile site remaining in Hawaiʻi (Slocumb 2004); continued preservation of which was stipulated as mitigation for demolition of the Nike Missile Site (OA-84) at DMR (U.S. Army Environmental Command 2008). The Nike Hercules missile battery is determined eligible for listing in the NRHP.

Kawailoa Training Area (KLOA)

Primary Function: Kawailoa Training Area (KLOA) land is owned primarily by Kamehameha Schools Bishop Estate, leased to the U.S. Army. KLOA was established as a troop maneuver and training area under a non-exclusive maneuver permit on January 25, 1955 (Nakata Planning Group 2000). Under this lease agreement, KLOA was used primarily for helicopter aviation training, including long-range patrol, helicopter unit tactical training, and command post displacement up to company level. Mountain and jungle warfare training was conducted by small units, and all access was via Drum Road, on foot, or via helicopter. The lease allowing military use of the property was extended in 2015. The only training activities allowed under the current lease are touch-and-go helicopter use of three LZs, and use of the paved Drum Road as a route from Helemano Military Reservation to Kahuku Training Area to minimize the use of Kamehameha Highway (U.S. Army Garrison, Hawaii 2016 (draft)). The Army has no developed facilities at KLOA.

History: The Kawailoa Training Area portion of the Anahulu Valley reflects human occupation from the AD 1300s. Early use of the valley was by people from the Waialua coast who came on seasonal forays for resource collection and some shifting cultivation; these people sometimes took shelter in shallow caves along the base of the valley walls. Between AD 1400 and 1600, small groups of people carried out household-based agriculture in the inland valley. In the last century before western contact, residences were in open-air sites as well as in some of the rock shelters.

Cultural Resources Overview: Identified archaeological sites at KLOA include agricultural terraces, rockshelters, habitation complexes, enclosures, pondfield systems, burial areas, and hearths (Rosendahl 1977, Kirch and Sahlins 1992, Anderson 1998, Cox and Zulick 2001). Of the known sites, 5 are eligible, 2 were determined not eligible for listing, and the remaining 72 are yet to be evaluated.

There are no buildings or structures in the RPLANS real property database reported at KLOA to be over 50 years old requiring evaluation.

Kīlauea Military Camp (KMC)

Primary Functions: KMC is located on 72 acres within Hawai‘i Volcanoes National Park (HAVO)⁷. KMC remains under the joint support of USAG-HI and USAG-Pōhakuloa under a Special Use Permit (SUP) from the National Park Service.

History: The Kīlauea summit area falls in a relatively remote and high-elevation zone that was used by ancient Hawaiians primarily for the collection of natural resources such as bird feathers for chiefly adornment and hardwoods for canoes, houses, and tools. Kīlauea Military Camp has many legends associated with Pele and her sisters due to the volcanic activity in the area (Rosendahl 1977).

During the nineteenth century, the volcano became a destination for sightseers, explorers, and scientists. In the late 1800s what is now Kīlauea Military Camp was used as pasture for Shipman’s Keauhou Ranch. The idea of Kīlauea as a national park was casually proposed as early as 1903, but it was not until 1910 that official interest from the territorial governor was transmitted to the Secretary of the Interior (Apple 1954). This was followed by a succession of bills to Congress in 1911, 1915, and 1916, to actually create the National Park.

In October 1921, the Army took control of Kīlauea Military Camp on the north edge of Kīlauea Crater and it became the first U.S. Army installation on Hawai‘i island, with the primary purpose of providing rest and recreation facilities for Army personnel.

During WWII, the facilities at KMC were transformed into training camps, and in 1942 KMC served as the headquarters for the 27th Division and was used exclusively for its quarters and training (Tomonari-Tuggle and Slocumb 2000). It was also used early during World War II to house Japanese detainees and late in the war as a prisoner-of-war camp. During the Vietnam War, structures at KMC were used as laboratories associated with chemical and biological warfare testing in upland ‘Ōla‘a and Waiākea; at least one of these structures still remains (Building 82) (Tomonari-Tuggle and Slocumb 2000).

Cultural Resources Overview: No subsurface cultural deposits have been located at KMC. Clearance surveys by the Hawai‘i Volcanoes National Park Cultural Resources Specialist identified five isolated historic period remains (including a stone walkway, an earth mound, a stone path, an L-shaped stone foundation, and a disturbed cement foundation), but none were determined to be eligible for listing (Tomonari-Tuggle and Slocumb 2000).

- Kīlauea Military Camp (KMC) is a Historic District determined eligible for listing on the NRHP for its association with the development of a recreation camp for U.S. military personnel on the Island of Hawai‘i. According to National Park Service records, the Hawai‘i SHPD concurred with the National Park Service’s determination that Kīlauea Military Camp is eligible for listing on the NRHP in 1996 (National Park Service 2006). The camp is also considered locally significant for its Plantation-style architecture using local materials and adaptation of National Park Service rustic and naturalistic design. According to a 2017 letter from the Superintendent at Hawai‘i Volcanoes National Park, there are 103 contributing elements and 42 non-contributing elements within the eligible Historic District, with two remaining buildings and structures yet to be evaluated (Orlando 2017).⁸

⁷ 72-acres is reported in the HQIS, but other Department of the Army datasets and NPS records report different acreages for KMC.

⁸ Note: NPS claims 103 contributing resources, 42 non-contributing, and 2 “undetermined” within the KMC district. These numbers do not match Army real property records that show 79 contributing or eligible, 42 non-contributing, and 2 yet to be evaluated.

Kīpapa Ammunition Storage Site (KAS)

Primary Function: The KAS is a regional ammunition storage facility, largely unused today with the exception of one magazine in the Lower Kīpapa group utilized by the National Oceanic and Atmospheric Administration (NOAA) as a tsunami and earthquake detection station (Pacific Cooperative Studies Unit University of Hawai'i 2010).

History: The Kīpapa Ammunition Storage Site (KAS) is located in the Kīpapa Gulch to the southeast of Wheeler Army Airfield on O'ahu's central plateau. Traditional agriculture was practiced at Kīpapa (Hammatt, Borthwick, and Shideler 1988). The place name is attributed to a fierce battle in which Mailikukahi defeated invading forces from Hawai'i, probably in the fourteenth century.

Prior to World War II, there was extensive agricultural use of the area for both sugar cane and pineapple crops. During World War II, the Army Corps of Engineers built one of the most extensive sets of underground storage sites in the Hawaiian Islands. It contained 79 tunnels or magazines of standard size and shape excavated into the canyon walls of Kīpapa Gulch and fitted with large steel doors. The Upper Kipapa facility contains 53 tunnels, while the Lower Kipapa facility contains 26 tunnels.

Cultural Resources Overview: There are five known historic-era archaeological sites at KAS, all of which are yet to be evaluated. There are presently no confirmed prehistoric-era archaeological sites for either the upper or lower Kīpapa Gulch areas.

In total, KAS has 70 buildings and structures over 50 years old in the RPLANS real property database; 68 of these are ammunition storage or air raid/fallout shelter with active historic status (listed, eligible, or contributing to an eligible district). There are an additional 2 air raid/fallout shelters not yet evaluated.

Mākua Military Reservation (MMR)

Primary Function: Primary use of Makua until 2004 was company-level combined arms live fire exercises (CALFEXs) by active Army, Marine Corps, and Hawai'i National Guard units. This allowed combined artillery, ground troops, and helicopters to be trained assaulting a mock military objective (U.S. Army Environmental Command 2013b). Military training at MMR has been curtailed in recent years as a result of a lawsuit filed by the Earthjustice Legal Defense Fund and Malama Mākua, which called for a complete Environmental Impact Statement (EIS) on military impacts to the Mākua natural and cultural landscape. In 2001, this lawsuit was settled out of court and the Army agreed to complete a comprehensive EIS and to allow limited Native Hawaiian access to important cultural sites. The Army is still resolving objections to the EIS published in 2009. Non-live fire training is still on-going at MMR in accordance with NHPA consultations for each type. Non-military uses are limited at MMR due to the safety hazards of the impact area, unexploded ordnance, and risks to rare and endangered plant species.

History: Mākua Military Reservation is located in the adjoining Mākua and Kahanahāiki Valleys, an important site in legends about the origin of the Hawaiian people. The area supported a small population, limited dryland agriculture, and fisheries beginning in about the fourteenth century. In the Great Mahele lands division in 1848 about 200 acres of Makua was awarded as kuleana lands, and the remainder became Crown lands. Much of the Crown lands were leased for cattle ranching. In the 1920s, the U.S. military acquired several small parcels in the upper valley for howitzer emplacements, and the Makua Valley has been extensively used for bombing and infantry training since the 1920s (U.S. Army Environmental Command 2013b). On December 7, 1941, after the bombing of Pearl Harbor, the Army took over the entire Makua-Kaena Point area for security and training operations. After the war, the military retained Mākua for training purposes, and it has remained in military use ever since (U.S. Army Environmental Command and U.S. Army Corps of Engineers 2009).

Cultural Resources Overview: Identified archaeological sites at MMR include heiau platforms, agricultural terraces, walls, enclosures, mounds, hearths (*imu*), habitation complexes, paths, and trails (Anderson 1998, Cox and Zulick 2001, Williams 2004, Kay 2013). Of the known sites, 12 are determined to be eligible for listing, 33 were determined to be ineligible for listing, and the remaining 72 sites have yet to be evaluated. One site is listed on the NRHP: Ukanipō heiau (site 50-80-03-181, listed 1982).

MMR includes 1 building over 50 years old in need of evaluation (RPLANS December 2016).

Mauna Kapu Communication Station Site (MKS)

Primary Function: The Mauna Kapu Communication Station Site occupies a ridgeline along the Waiʻanae Mountain Range and remains a critical communications facility for the U.S Army in Hawaiʻi.

History: Mauna Kapu Communication Station was built in 1948.

Cultural Resources Overview: MKS contains no identified archaeological sites.

MKS has 2 buildings over 50 years old in need of evaluation (RPLANS December 2016).

Mokulēʻia Army Beach (MAB)

Primary Function: Mokulēʻia Army Beach is a recreation-only facility with occasional training activities. It consists of recreational beachfront adjacent to Dillingham Military Reservation.

History: Historically, Native Hawaiians used the area near MAB for growing food crops. A historic trail passed near the area (Rosendahl 1977). The Jaukas type sandy soil was used for burials in the traditional period. Post-WWII, Mokulēʻia Army Beach was established as a recreation-only facility.

Cultural Resources Overview: MAB is largely undeveloped and there are no identified archaeological sites (Rosendahl 1977).

Pililāʻau Army Recreation Center (PARC)

located within Waianae-Kai Military Reservation (WMR)

Primary Function: Waianae-Kai Military Reservation is the official real property site name in which the Pililāʻau Army Recreation Center (PARC) is located. PARC is a recreational facility for active duty, reserve, and retired military personnel and their families.

History: This area of the Waiʻanae coast is known to have had an active agricultural and deep sea fishing occupation in historic times. WMR is a beachfront site located on the leeward (west) coast of Oʻahu on Pokai Bay, to the south of the Mākua Military Reservation. WMR contains a recreation facility formerly known as the Waianae Army Recreation Center, which was renamed Pililāʻau Army Recreation Center on December 12, 2003 in commemoration of Herbert Kalili Pililāʻau who received the Congressional Medal of Honor for heroic actions during the Korean War. As with Mokulēʻia Army Beach, the Waianae Army Recreation Center (now PARC) was established as a formal recreational facility in the post-WWII era, offering a number of beachfront cabins for use by military personnel along with some multi-purpose recreational buildings, including the reconstructed Waiʻanae Beach Club.

During renovations to the Recreation Center that began in 1984, human remains were discovered and determined to be Native Hawaiian. The Native Hawaiian human remains were reburied in a special burial site on the grounds after consultation with Native Hawaiian organizations.

Cultural Resources Overview: For archaeological purposes, the Waianae-Kai Military Reservation is considered a single eligible site and has been assigned State Inventory of Historic Properties number 50-

80-05-3998 by the State of Hawai'i. The site is a highly significant pre-Contact and post-Contact Native Hawaiian cemetery. Excavations have yielded Native Hawaiian human remains in at least two different areas of the installation, and a series of petroglyphs carved into the rocks on the seaward side of the sea wall were exposed and documented in 2016.

The USAG-HI building inventory lists 5 buildings at WMR that are 50 years old yet to be evaluated (RPLANS December 2016).

An Archaeological Collection Summary for Waianae Army Recreation Center, Hawai'i: Information Provided for Compliance with the Native American Graves Protection and Repatriation Act Section 6 Summary was completed in 1996 (U.S. Army Corps of Engineers 1996c). According to the report, human remains of at least 33 individuals and thousands of associated funerary objects were recovered at the installation between 1984 and 1990, all of which were reportedly reinterred at the installation. Some were reinterred with their associated funerary objects, but some funerary objects may remain part of collections at other repositories.

Pupukea-Paalaa-Uka Military Road (Drum Road)

Primary Functions: Currently, Pūpūkea-Pa'ala'a-Uka Military Road (Drum Road) serves as a major transportation artery and vehicle access road for military training along the western margin of the Kawaihoa Training area, extending from Helemano Gate to the Kahuku Training Area.

History: The general area where Drum Road is located was originally used by Native Hawaiians for food crop cultivation (Rosendahl 1977). During the early twentieth century, the "Emergency Relief Act (ERA) Roads and Trails Project funds were turned over to the 3rd Engineers, and they began road construction in various strategic points" (Addleman (Lt) 1946). "By June of 1937, the date of the conclusion of the ERA Roads and Trails Project, the following had been completed by the 3rd Engineers: Kolekole Pass road, Wahiawā- Pūpūkea Trail, Barbers Point road nets, and various other roads" (Addleman (Lt) 1946). The purpose of "Wahiawa-Pupukea Trail" (now known as Pupukea-Paalaa-Uka Military Road or Drum Road) was most likely to access gun emplacements in the Ko'olau Mountains.

Cultural Resources Overview: Twenty-three archaeological sites were identified in a 2002 survey conducted by Pacific Legacy, Inc. Five are traditional Hawaiian in age and the remaining sites consisted largely of military related development and use of the road. A single metal cross presumably marking a grave was also recorded (Whitehead, Cleghorn, and McIntosh 2005). All of these sites are in need of evaluation.

There are no historic buildings or structures over 50 years of age in need of evaluation.

Schofield Barracks Military Reservation (SBMR)

Primary Function: While the number of troops and level of activity at SBMR has varied considerably since the close of World War II, the reservation continues its importance as a training center and post for the 25th ID, who has remained the principal occupant of SBMR.

Non-military use areas within SBMR include the Kolekole Trail, which is open to military personnel and their guests on select dates; and the Schofield-Waikane Trail, sections of which are owned by the state of Hawai'i and the Army. Access permits are required, and are available through Directorate of Public Works' Real Estate Section for access through SBER, and from the Division of Forestry & Wildlife, Department of Land and Natural Resources for access to Hawai'i State lands.

History: Schofield Barracks Military Reservation is within Wai'anae Uka, a traditional Hawaiian land unit that is part of the Wai'anae *ahupua'a*. Based on oral traditions, sometime around AD 1000 the site of

Kūkaniloko (now a State Park near Schofield Barracks) and much of the central plateau of O‘ahu was connected to support of the status and power of the O‘ahu chiefs, *lō-ali‘i*. Because this setting was isolated from the other areas of the *ahupua‘a*, Hawaiians used a trail to access coastal areas of the *ahupua‘a* via Kolekole pass. Archaeological sites in the area include important ritual centers, as well as intensive food production and habitation sites for all social classes. By the beginning of the historic era, the ruling center for O‘ahu had already moved from the central plateau area to Waikiki. The political and ritual importance of the area declined rapidly in the nineteenth-century (Desilets et al. 2011).

Sandalwood and *koa* trade with China from about 1816-1830 resulted in deforestation of much of O‘ahu’s central plateau, which was previously covered with a dense native forest. In the late 1800s, James I. Dowsett had ranching interests on lands now occupied by Schofield Barracks (Tetra Tech 2015).

After the annexation of Hawai‘i to the United States in 1898, the Leilehua Plain in central O‘ahu was selected as the site of a temporary military camp in 1905 for the Organized Militia, which later became the National Guard. The Army's role in Hawai‘i at that point was to guard the Navy while in port. The Leilehua Plain's central location was ideal for rapid deployment to all of the island's coasts. In 1908, the site for Schofield Barracks was selected as the base for O‘ahu's mobile defense troops because of its strategic central location between the Wai‘anae Mountains and the Ko‘olau Range and later named after Major General John M. Schofield, Commander of the Army Division of the Pacific, who came to Hawai‘i in 1872 on a mission to evaluate the defense possibilities of various Hawaiian ports (Alvarez 1982). Construction of the new post began in 1913.

The post developed rapidly in the following years, although construction was delayed during World War I when all of Schofield Barracks' tenants were called to war. Following World War I, the Army increased the strength of the Hawaiian Department and formed a combat division at Schofield Barracks in 1921. The establishment of this large Hawaiian Division, as well as increased tensions throughout the Pacific, resulted in continual construction at Schofield Barracks and increased defense mobilization throughout the islands during the 1920s and 1930s.

The Sino-Japanese War, which began in 1937, showed Japan’s intent to militarily extend its hegemony (Conn, Engelman, and Fairchild 1964). Defense mobilization throughout the islands increased and Schofield Barracks became the Army’s largest single garrison and the second largest city in the territory with a population of 20,000 people.

The Hawaiian Division was reorganized in 1941, forming the 24th Division and 25th Division, that latter of which was later renamed the "Tropic Lightning" Division. With the entry of the United States into World War II following the bombing of Pearl Harbor and Wheeler Army Airfield, SBMR became the major training, staging, and supply center of the War in the Pacific. In 1951, the Hawaiian Infantry Training Center at Schofield Barracks was established to train replacement troops destined for Korea. The Korean War ended in 1953 with the signing of an armistice that restored pre-war conditions on the Korean peninsula. SBMR played an important role in both the Korean War and the Vietnam War by providing basic training for many raw recruits destined for Asia, and continues to today in support of the U.S. Army Pacific Command.

Cultural Resources Overview: As a whole, SBMR contains a total of 134 identified archaeological sites yet to be evaluated. The majority of identified sites are of Native Hawaiian origin and include heiau structures, agricultural terraces, ‘auwai, mounds, enclosures, stone alignments, irrigation complexes, pondfields, and roads. SBMR also contains several historic era sites, including concrete foundations, tunnels/bunkers, and a reservoir.

The total number of historic facilities in the RPLANS real property database does not provide a breakdown by training area (SBER, SBSR, or SBWR). Thus, facilities are tallied under SBMR as a whole, which has 458

buildings and structures over 50 years old. 280 of the buildings and structures have an active historic status (listed, eligible, or contributing to an eligible district) and 5 are determined to be non-contributing elements or not eligible for listing (RPLANS December 2016). There are 172 buildings and structures over 50 years of age yet to be evaluated.

- Schofield Barracks Historic District, which is listed in the NRHP (1998) and Hawai'i State Inventory of Historic Properties (1997), included 276 contributing buildings and 10 contributing sites, features, structures, and objects; these include eight Quads of barracks, three residential neighborhoods, Carter Hall, the Health Clinic, Macomb and Funston Gates, the Sgt. E.R. Smith Theater, the post gymnasium, the Soldiers' Chapel, and the original post library (now housing the Tropic Lightning Historical Center). The Schofield Barracks Historic District was listed in the NRHP on July 31, 1998.
- The Schofield Barracks Stockade is an individually listed historic building on the NRHP (1998) and Hawai'i State Inventory of Historic Properties (1997).

Schofield Barracks Cantonment

Primary Functions: The current military mission of SBMR as a whole is to support the 25th ID, USARHAW, USAG-HI, and the 45th Support Group. The Schofield Barracks Cantonment houses administrative, residential, industrial, and commercial buildings with a network of roads and utilities for a population of over 60,000 military, civilians, retirees, and family members (Directorate of Public Works May 2016) (Belt Collins Hawaii with Mason Architects/International Archaeological Research Institute 2000a).

History: In the late 1800s, James Dowsett owned and operated land around what is now the Main Post as a ranch (Tetra Tech 2015). The area became Federal land after the annexation of Hawai'i by the United States in 1898 and the Leilehua Plain in central O'ahu was selected as the site of a temporary military camp in 1905. In 1908, the site for Schofield Barracks was selected as the base for O'ahu's mobile defense troops. This temporary camp was alternately known as Leilehua Barracks or Castner Village, but was later renamed after Lieutenant General John McCallister Schofield (1831-1906). Construction of the new post began in 1913.

In 1921, a new unit was established at Schofield Barracks, the Hawaiian Division. At the time, it was the only complete division in the Army. In 1926, a congressional directive established a special "Military Post Construction Fund" for installation improvements (R. Christopher Goodwin and Associates 1995). In the years following this directive, the Quartermaster Corps changed its emphasis from improving single buildings to overall landscaping of installations. The Army employed distinguished military and civilian landscape architects to apply contemporary approaches to city planning at Army posts, such as the Garden City and the City Beautiful movements. Schofield Barracks benefited from the inflow of construction monies. Between 1926 and 1934, numerous buildings were erected and an extensive road system was developed throughout the post. The design followed the principles of Garden City planning. In the 1930s, new construction reflected the "art deco" or "art moderne" style (Alvarez 1982). The Macomb and Funston Gates (built in 1932) and the post theater (built in 1933), embody this style.

Defense mobilization throughout the islands increased during the 1930s and 1940s and as a result, Schofield Barracks became the Army's largest single garrison. However, following the WWII, Schofield Barrack's population shrank to 5,000 troops. At the conclusion of the Korean War in 1953, the Army dramatically increased family housing at Schofield Barracks. Virtually the entire western portion of the Schofield Barracks cantonment transformed from athletic fields, open space, and training areas into new housing areas.

In 1957, the U.S. Congress mandated a nationwide construction program for military housing known as Capehart housing (Thompson c. 1982). The first Capehart project in Hawai'i involved construction of 1,326 units at Schofield Barracks, completed by 1967.

Cultural Resources Overview: Previous studies unanimously concluded that more than a century of intensive impacts by military land use, urban development, and commercial agriculture have substantially altered the cultural landscape of the central plateau's tablelands, and thus the likelihood of previously unrecorded traditional Hawaiian sites or archaeological deposits is very low within developed areas of the cantonment (Robins, Roberts, and Gilda 2007, Tetra Tech 2015, Desilets et al. 2011, Tomonari-Tuggle and Slocumb 2000). The cantonment does contain a few historic-era sites, including 10 sites yet to be evaluated (Belt Collins Hawaii with Mason Architects/International Archaeological Research Institute 2000a, Roberts, Robins, and Buffum 2004).

See SBMR above for complete listing of buildings and structures over 50 years old.

Schofield Barracks East Range (SBER)

Primary Function: SBER is presently used for small-unit dismounted maneuvers and reconnaissance, as well as a designated engineer training area. SBER is the location of the Lightning Academy, the Jungle Operations Training Center (JOTC), and a confidence obstacle course (Directorate of Public Works May 2016).

History: The history of the Schofield Barracks East Range is largely intertwined with that of the Schofield Barracks Cantonment, as both were acquired and managed as a unit (Anderson 1998). The original camp area encompasses what is now SBMR and SBER. SBER was established as a training range after the battle of Midway in 1942.

Cultural Resources Overview of SBER: SBER has 13 known archaeological sites yet to be evaluated, including a terrace with aligned stones, a pecked boulder, and the O'ahunui stone; as well as historic era sites, including concrete foundations, a tunnel/bunker, and reservoir (Anderson 1998, Robins and Spear 1997).

See SBMR above for complete listing of buildings and structures over 50 years old.

Schofield Barracks South Range (SBSR)

Primary Function: Today, SBSR contains landing zones (LZs), pickup zones (PZs), small arms ranges, artillery firing points, and a variety of training ranges for engineers, land mines and explosives, and Military Operations in Urban Terrain (MOUT) (Directorate of Public Works May 2016).

History: Much of the area now comprising the SBSR was historically used for pineapple farming. Initial portions of SBSR were established in the 1960s. "In 2005, the Army purchased 1,402 acres south of the Schofield Barracks cantonment and east of the South Range from the Campbell Estate... At the time of purchase, the lands, including broad ridges and stream floors, were still under pineapple cultivation as they had been for almost a century" (Tetra Tech 2015).

Cultural Resources Overview of SBSR: The majority of the 62 identified archaeological sites at SBSR are of Native Hawaiian origin and include agricultural terraces, 'auwai, mounds, enclosures, stone alignments, irrigation complexes, pondfields, and roads (Robins and Spear 1997; Anderson 1998, Tetra Tech 2004, Kaschko et al. 2011), all of which are yet to be evaluated.

See SBMR above for complete listing of buildings and structures over 50 years old.

Schofield Barracks West Range (SBWR)

Primary Function: The SBWR contains multiple small-arms ranges, artillery firing points, and explosives trainings area, as well as duded and high-hazard impacts areas. A Battle Area Complex (BAX) facility is also located within the SBWR, which can support up to company-sized mounted and dismounted maneuver training (Directorate of Public Works May 2016).

History: SBWR is the oldest training range on O‘ahu, having been used for artillery and small arms training since the early 20th century.

Cultural Resources Overview of SBWR: Most of the 49 identified archaeological sites at SBWR and the BAX are of Native Hawaiian origin and include heiau structures, agricultural terraces, ‘auwai, fishponds, enclosures, stone alignments, and roads (Anderson 1998, Buffum and Peterson 2005, Buffum, DeBaker, and Peterson 2006, Robins, González, and Peterson 2005, DeBaker and Peterson 2009, Robins and Spear 1997, Toney and Desilets 2010, Sims and Hawkins 2014, Kaschko and Tome 2011, Winburn, Byerly, and Mark 2013, U.S. Army Environmental Command 2008), many of which are yet to be evaluated.

See SBMR above for complete listing of buildings and structures over 50 years old.

Signal Cable Trunking System

Primary Functions: The Signal Cable Trunking System provides communications infrastructure.

History: The Signal Cable Trunking System was initiated in 1941 as part of the World War II build-up and construction of additional communication centers and cable systems continued until the 1960s. The Signal Cable Trunking System extended around the island, connecting every pre-existing and newly constructed costal defense installation, command post, fire control station, and other associated sites (Thompson c. 1982).

Cultural Resources Overview: The trunking system includes 6 communications centers that were preexisting at the time of construction: 30 centers constructed in 1941, and 6 centers added during the Cold War between 1956 and 1989, all of which are yet to be evaluated. The system also includes 17 cable vaults built in 1941 and more than 1,100 miles of cable, all of which still need to be evaluated (RPLANS December 2016).

Tripler Army Medical Center (TAMC)

Primary Functions: The Tripler Army Medical Center (TAMC) is the largest military medical treatment facility in the Pacific Basin. It is located atop Moanalua Ridge and its primary mission is to promote, sustain and enhance service member health; provide a trained and ready medical force in support of full spectrum operations with a culture of safety; and deliver leading edge, high quality and compassionate health services to warriors, military families and veterans (U.S. Army Environmental Command 2013c). As a teaching medical center, TAMC provides comprehensive medical, dental, and other health facilities and related services to the personnel of all military branches, active and retired, and their dependents that are stationed in or are residents of the State of Hawai‘i.

History: In Native Hawaiian history, the legend of Kaupe is associated with the general area where Tripler Army Medical Center is located. A great battle is believed to have been fought in the area as well. Originally, the land that makes up TAMC was used by Native Hawaiians to raise food crops and other plants (Rosendahl 1977).

The first hospital in O‘ahu to bear the name Tripler was established as a general hospital in 1907 at a site near the Palm Circle on the Fort Shafter military installation. The original hospital complex contained

several buildings including an administrative office, mess hall, wards, and an operating room. It became a Base Hospital on June 20, 1912 and on June 26, 1920 the hospital was named Tripler General Hospital after Brigadier General Charles Stuart Tripler (1806- 1866) to commemorate his contributions to medicine during the Civil War.

The Japanese attack on Pearl Harbor on December 7, 1941 brought nearly immediate change to the Tripler hospital disposition with the first casualties arriving only moments after the attack began (The Official Homepage of the United States Army). During the WWII period, the patient capacity changed significantly leading to the desire for a new facility. In 1943, plans for the current Tripler Army Medical Center were on the drawing table and construction for the state of the art hospital finished in 1948. Lt. General Robert C. Richardson, Jr. inspired the master plan and execution by the architects York and Sawyer, out of New York, and noted Landscape Architects Catherine and Richard Thompson, who were pioneering landscape architects in the territory of Hawai'i, especially on the island of O'ahu (Center for Environmental Management of Military Lands 2016).

Architecturally, the new medical complex was designed to take advantage of its topographic setting and soon became a pink stucco landmark visible through much of southern O'ahu. Over five miles of winding roadway were cut into the Moanalua hillside to minimize the steep grades. Pink stucco buildings were placed irregularly and informally to catch the prevailing *mauka* winds to create a relaxing, residential atmosphere. Canopies were installed to protect the buildings from sun and rain (Van Hoften 1970).

Cultural Resources Overview: A relatively large portion of TAMC has received archaeological survey coverage. Known archaeological resources include a temporary shelter and agricultural terrace (Rosendahl 1977, Hammatt and Chioioji 1994, Zulick and Cox 2000, Eble and Anderson 2001).

TAMC contains 42 buildings and structures that are 50+ years old. According to the RPLANS real property database, 25 facilities are reported as contributing elements of an eligible Historic District, 4 facilities reported as non-contributing, and 13 buildings and structures over 50 years old yet to be evaluated. The family housing under management by Island Palm Communities, LLC are not eligible according to the Programmatic Agreement for the Residential Communities Initiative.

Waikakalaua Ammunition Storage Tunnels (WAST)

Primary Functions: Currently, the Waikakalaua Ammunition Storage Tunnels (WAST) are inactive (U.S. Army Environmental Command 2013d).

History: WAST is located in central O'ahu, south of Wheeler Army Airfield and southwest of the town of Mililani. This area was known to be a battleground in prehistoric times (Tomonari-Tuggle and Bouthillier 1994). Historically, it was used by Native Hawaiians for food crop cultivation (Rosendahl 1977). Sugar was the main crop grown in the area before the Army took it over for ammunition storage in response to the Japanese attack on Pearl Harbor on December 7, 1941. Waikakalaua originally consisted of 52 tunnels built into the hillside. Historically, WAST also housed a large number of civilians workers for military construction projects who were placed in contractor's camps built at this site.

Cultural Resources Overview: No archaeological sites are documented for the Waikakalaua Ammo Storage Tunnels site. The storage site originally supported 52 WWII-era tunnels built into the canyon walls of the Waikakalaua Gulch; 49 of these air raid/fallout shelters remain, 48 of which have an active historic status (listed, eligible, or contributing to an eligible district), and 1 of which is not yet evaluated (U.S. Army Environmental Command 2013d, RPLANS December 2016).

Wheeler Army Airfield (WAAF)

Primary Function: The primary mission of WAAF is to train, equip, and sustain Army forces in the Pacific Theater, and provide aviation support to the Hawai'i Army Air National Guard and a number of DoD activities, including the Defense Communications Agency, the Air Force's 6010th Aerospace Defense Group, the Hawai'i Army National Guard's Aviation Support Facility, and the 25th Infantry Division Combat Aviation Brigade (U.S. Army Environmental Command 2015b). WAAF provides administration, housing maintenance, training, and flight facilities for peacetime mission requirements, including security and law enforcement support (Belt Collins Hawaii with Mason Architects/International Archaeological Research Institute 2000b). WAAF has all aviation training on O'ahu (Directorate of Public Works May 2016).

History: Wheeler Army Airfield was established in 1922 on lands that were once part of the traditional Hawaiian districts of Wai'anae and 'Ewa.

In 1922, the Army's air service left the jointly operated Army-Navy field at Pearl Harbor and moved to the improved all-Army Wheeler Field on the central plateau. WAAF is Hawai'i's first all-Army airfield and became the home base for the Divisional Air Service. The field met the increasing needs for facilities to support land planes used by the Army's Hawaiian Department. Early permanent construction included storage tanks and hangars, but even until the late 1920s, the field was a simple cleared strip of land. Army aviators assisted Army engineers in mapping the island, practiced bomb drops during maneuvers, sowed tree seeds for the Department of Agriculture, and took countless aerial photographs of all the islands (Tomonari-Tuggle and Bouthillier 1994).

In 1935 Amelia Earhart made the first solo Hawai'i to mainland flight departing from Wheeler Air Field. In 1937 Earhart's plane landed at Wheeler Army Airfield piloted by Paul Mantz. It was to be the starting point of what became an aborted attempt at an around-the-world flight. Mantz was dissatisfied with Wheeler and flew the plane to Luke Field, which had a paved runway. It was there that Earhart had a mishap upon take-off that damaged her Lockheed Electra requiring that it be shipped back to California for repairs. It was from Oakland, California that she began her final, ill-fated, world flight (Loomis and Ethell 1985, Goldstein and Dillon 1997).

The years from 1926 to 1932 marked significant improvements to aviation facilities on Army posts throughout the country. Wheeler Field was greatly improved and expanded during this period. In 1926, the Air Service was formally designated the Army Air Corps. Nationwide, the decade of the 1930s was characterized by improved air field facilities, particularly to support on-going development of heavy bombers. Facilities included hard surface runways, landing lights, larger aircraft hangars, and larger maintenance facilities. Wheeler Field was part of this construction boom. All of the original wooden buildings were demolished and new construction focused on the north edge of the post. Housing, hangars, headquarters, a fire station, and other support buildings aligned along a central thoroughfare, with hangars and technical buildings on the south side of the road and housing and administration built along loops to the north of the road. A new dirt runway was graded along the south side of the hangars.

The Pursuit Wing based at Wheeler Field was the interceptor arm of the AWS being instituted just prior to the Japanese attack on Pearl Harbor. On the morning of December 7, 1941, Japanese planes swept over the islands in a surprise attack. Major damage occurred at Pearl Harbor, Hickam Field, and at Wheeler Field. Wheeler was connected to the Kunia complex by a runway in the nearby Wai'eli Gulch (on the present Wheeler Army Airfield) to service the planes. However, Kunia was never used for this purpose.

The Pearl Harbor attack instigated a new round of construction. At Wheeler, two new runways were added. With the newly paved original runway these new ones formed a triangle that allowed all three to be used at the same time.

Wheeler Field is a typical design of early air bases, with all buildings grouped on one side of the air field in a linear pattern. It also exhibits the Garden City concepts of planning popular at the time, with its clustered residential loops and its picturesque, tree-lined, curving streets. The Mission style construction has been maintained and is a contributing factor to the character of the installation (Belt Collins Hawaii with Mason Architects/International Archaeological Research Institute 2000b).

The installation came under the jurisdiction of the newly created Air Force and was renamed Wheeler Air Force Base in 1948. Wheeler Air Force Base was deactivated in 1949 but reactivated in 1952 during the Korean War. The Army regained control of Wheeler Air Force Base in 1977. During this time it became the center for all Army aviation activities in the Pacific. In 1991, the site was renamed Wheeler Army Airfield when the installation came under formal control of the Army (U.S. Army Environmental Command 2015b).

Cultural Resources Overview: Most of the identified archaeological sites at WAAF are affiliated with the historic era. 11 sites need evaluation. Potentially eligible sites include the O‘ahu Rail and Land Company (OR&L Co.) rail line trestle (Site 50-80-08-6872) and the Maunauna Site in the southwestern bluff of Waiele Gulch (Site 50-80-07-6759) (Rosendahl 1977, Belt Collins Hawaii with Mason Architects/International Archaeological Research Institute 2000b, a, Buffum et al. 2004). Subsequent surveys found no evidence of traditional Hawaiian or early historic cultural resources (Hammerle and Desilets 2006).

WAA contains 294 buildings and structures over 50 years old. 207 of the buildings and structures have an active historic status (listed, eligible, or contributing to an eligible district), 7 were determined to be noncontributing elements of a historic district, and 80 are yet to be evaluated (RPLANS December 2016).

- Wheeler Field is a National Historic Landmark District (1987) as one of the sites attacked by the Japanese on December 7, 1941. The NHL district includes the flight line, hangars, and the barracks building.
- Wheeler Historic District is also a NRHP eligible historic district that includes hangars, a portion of the aircraft parking apron, WWII barracks building, and the Garden City neighborhoods that were constructed in the early 1930s by the New Deal programs.
- NRHP eligible Family housing units are subject to the terms of the Privatization of Family Housing Programmatic Agreement (see ICRMP Section 6.4), which requires maintenance of these buildings in accordance with the Secretary of the Interior’s standards for historic buildings.

3.5. Mission Activities and Military Impacts to Cultural Resources

Impacts to Historic Buildings, Structures, Districts, and Landmarks

Undertakings that pose potential threats to historic architectural resources generally involve alterations to the property or the surrounding area. These include:

- Digging;
- Demolition;
- Pests and Rodents;
- Vegetation Encroachment;
- Historic Property Modifications and Maintenance can damage the property when renovations, additions, and repairs are not consistent with the historic character; and
- Deterioration can cause irreparable damage to historic materials. Buildings may also deteriorate without periodic major repairs or renovation programs for upgrading utilities and/or structural systems to current standards.

External threats and activities that can impact historic properties are:

- Natural Disasters and Accidents;
- Land Transfers, Leases, and Easements of land to federal or non-federal agencies, or the granting of land use permits, leases, licenses, or right-of-way easements are a threat to historic resources unless legal documents contain covenants providing protection;
- Loss of Historic Documents pertaining to historic properties can occur through deterioration or be lost unless inventoried and stored to prevent deterioration or permanent loss;
- Short Range Planning is heavily influenced by the Army's funding programs and priorities and can lead to project proposals that adversely affect historic properties; and
- Downsizing/Inventory Reductions can create pressure to demolish historic properties.

Impacts to Archaeological Resources

Potentially adverse impacts to archaeological resources are most common on training lands. These threats include:

- Maneuver damage from wheeled and tracked vehicles;
- Vandalism and looting (either by military personnel or the public);
- Explosive ordnance;
- Target insertion;
- Excavation and earth-moving activity;
- Wildland fire operations; and
- Natural erosion processes that may be exacerbated by the above.

External threats and activities that can impact historic properties are:

- Natural Disasters and Accidents; and
- Land Transfers, Leases, and Easements of land to federal or non-federal agencies, or the granting of land use permits, leases, licenses, or right-of-way easements are a threat to historic resources unless legal documents contain covenants providing protection.

Common forms of excavation within training areas are mission-related and are implemented for purposes of tactical concealment and survivability. These include large volume excavations carried out by Combat Engineers with heavy earth moving equipment to partially or entirely conceal artillery (gun emplacements), personnel carriers and support vehicles, or for defensive purposes. Deep excavations

usually accompany the construction of bunkers, shelters, and protective walls (Department of the Army 1985). Individual fighting emplacements (e.g., fox holes) are less common and less invasive. Because of the large volume of displaced earth from tactical digging operations, they can have a severe impact to the surface and subsurface archaeological record.

Another training-related threat is the unauthorized movement and use of stones to create "hasty fortifications" for tactical defensive positions. The removal or reconfiguration of stones from archaeological features destroys their integrity and may make them unrecognizable.

Apart from military training activities, there are a host of other potential threats to archaeological resources in these training areas. These include the following ground-disturbing and/or vegetation-clearing activities:

- Facilities development (site grading and improvements);
- Underground utilities construction;
- Hazardous waste remediation;
- Insertion of utility poles or fence posts;
- Vegetation grubbing;
- Landscaping;
- Unauthorized excavation of archaeological sites (looting);
- Soil investigations;
- Operation of (off-road) vehicles in unpaved areas;
- Soil contamination;
- Recreational activities, including public hunting and ATV use;
- Unexploded Ordnance Detonation; and
- Pedestrian human or animal activity (Anderson 1998).

Recognizing potential impacts to archeological resources on training lands, DMR, SBMR, and KTA have designed "go/no go areas." MMR also contains site protection measures that restrict access to archeological sites.

Impacts to Sacred Sites

Adverse impacts to Sacred Sites corresponds with the above discussion on archaeological sites and inadvertent damage from military training to vandalism and looting, should any Sacred Sites be identified at the installations on O'ahu.

Impacts to Curated Archaeological Collections and associated records

Curated artifact collections are typically not directly impacted by the military mission; however, they can be negatively impacted when the requirements of 36 CFR §79, Curation of Federally Owned and Administered Archaeological Collections are not followed. They may also be impacted by decisions regarding changing use of space in facilities that house the materials, as well as natural disasters and accidents.

Impacts to Cultural Items

NAGPRA cultural items may be negatively impacted when archaeological sites and/or burials are inadvertently damaged due to military training, vandalism, looting, natural disasters, or accidents. Violation of the provisions of AIRFA, ARPA, or NAGPRA may also result in adverse impacts to cultural items.

4. GOALS AND OBJECTIVES

The purpose behind these goals and objectives is the integration of legal requirements for Cultural Resources Management into the everyday operations of USAG-HI's military mission and support activities. This ICRMP incorporates guidelines and procedures for cultural resources management into a single document to more efficiently fulfill management responsibilities.

4.1. Goals

- Efficiently meet USAG-HI's obligations for compliance with NHPA, NEPA, NAGPRA, ARPA and other legal requirements in an efficient and effective manner consistent with DoD standards while minimizing effects on the military mission
- Ensure that current and planned installation programs, plans, and projects are integrated with cultural resources management initiatives
- Enforce Federal laws that prohibit vandalism of cultural resources on Federal properties through law enforcement, monitoring, and public awareness
- Identify and evaluate cultural resources for eligibility for inclusion in the National Register of Historic Places and maintain an up-to-date inventory of historic properties
- Avoid or minimize adverse effects to historic properties that meet eligibility criteria for inclusion in the National Register of Historic Places
- Preserve significant historic properties whenever possible and mitigate appropriately in the long-term public interest when adverse effects cannot be avoided
- Ensure that appropriate consultation procedures are followed at the earliest planning stage of any undertaking that may affect historic properties
- Maintain a cultural resources program staff that meets the *Secretary of the Interior's Professional Qualification Standards* (36 CFR §61)
- Maintain confidentiality regarding the nature and location of archaeological sites unless the Federal agency official determines that disclosure would further the purpose of ARPA and not create a risk of harm
- Maintain curation of archaeological collections and records, and orderly control of the technical libraries and associated records needed to support the CRM program

4.2. Planning Objectives

Improve coordination in compliance review of undertakings with emphasis on timely and effective coordination between proponents and the Cultural Resources Manager. Encourage use of DPW-wide GIS for more effective and reliable exchange of planning information among programs. In order to better support planning and operations within the training areas, these GIS layers should identify whether a particular survey area was searched adequately to meet the "reasonable and good faith" standard for identifying historic properties and other cultural resources should there be an undertaking planned within that area, or whether supplemental identification efforts would still be needed for major undertakings.

The locations, extent, and the important attributes of each known archaeological site also needs to be systematically compiled in GIS and maintained to provide "best available" current data for all planners within USAG-HI. Note that some archaeological site location data are restricted from general public dissemination. Access to this data is For Official Use Only (FOUO) and is restricted to approved Garrison personnel.

A systematic update of sensitive cultural resources area GIS maps is also necessary for prioritizing future cultural resources survey efforts and for alerting planners of potential cultural resources issues in

preliminary planning efforts. The current maps combine information from several sources, including known site locations with buffers and unsurveyed areas judged to have high probability of site occurrence.

Recent emphases in real property accounting standards within DoD have resulted in an increased emphasis on documenting SHPD concurrence regarding a particular property's eligibility for listing in the NRHP. Eligibility establishes particular standards of care and responsibility for USAG-HI, the applicability of which needs to be reflected in the real property inventory records. An agency determination without written concurrence from the SHPO is not sufficient for the accounting standard, especially for buildings, structures, and objects managed by USAG-HI. Requests for SHPD concurrence as to the eligibility of properties and sites will be a significant part of the correspondence and interaction between the Garrison and the SHPD, whether or not the subject properties are at risk of being affected by a particular project or undertaking.

It is important that Real Property information and GIS be integrated with cultural resources inventory data regarding historic buildings, structures, objects, and districts. USAG-HI needs to develop adequate tracking of real property with respect to the historic status code of each real property asset. The real property inventory is designed only to record the status of "historic properties" as defined in the NHPA, but a more effective way of managing property data records for cultural resources that do not meet the definition of "historic properties" is also needed.

Maintenance Plan(s) for historic properties outline a proactive approach to the management of historic properties. This proactive approach assists in the reduction of operating costs for historic buildings, structures, objects, and districts and ensures that all applicable regulatory laws and regulations are adhered to. The Garrison needs to develop Maintenance Plans for historic properties, detailing the methods for, and monitoring of, maintenance, repair, and rehabilitation of historic buildings, structures, objects, and districts.

Over the course of this plan, USAG-HI will improve its stewardship of important cultural resources by:

- Conducting archaeological inventory survey in areas not adequately surveyed as needed to support training and other projects and missions.
- Pro-actively consulting with Native Hawaiian Organizations and other interested parties in accord with Department of Defense and Department of the Army guidance.
- Making up-to-date cultural resources information easily accessible to planners, project proponents, and others through use of GIS and databases.
- Evaluating previously unevaluated buildings that are 45 years old or older.
- Continuing to implement formal agreements through consultations that satisfy the regulatory requirements and streamline their implementation.
- Maintaining a comprehensive inventory and associated records for all cultural resources.
- Conducting regular education regarding cultural resources and procedures related to them for:
 - Military personnel newly assigned to USAG-HI
 - Planners, project proponents, and others whose programs and actions have high potential for affecting cultural resources.
 - Members of the public who are intended to benefit from historic properties and other cultural resources.
- Cultural resources protection measures are an important component of the cultural resources management program. There shall be no collection of archaeological items or artifacts except as necessary in the course of official job duties or within the terms of a valid ARPA permit. All personnel newly assigned to USAG-HI shall be informed of the prohibitions against collecting archaeological items, and of the Garrison policy of enforcing these prohibitions. USAG-HI shall

not make public information regarding the specific location of archaeological sites when such disclosure could endanger the continued integrity of the sites.

4.3. 5-Year Project Planning

Over the next five years, USAG-HI expects to have undertakings that could potentially affect historic properties. These potential undertakings include routine maintenance and operations of historic buildings and ranges, construction projects, natural resources management activities and recurring training exercises. Proponents for such undertakings include USARHAW TSS, USAG-HI DPW, and other tenant organizations, and training area users.

Listed below are several such projects that may be started within five years that USAG-HI is currently tracking as potentially affecting historic properties.

- Construction of Company Operations Facilities and associated structures at Schofield Barracks 9000 Block
- Construction and use of training areas associated with the Jungle Operations Training Center
- Adaptive Reuse of historic NHL Wheeler Army Airfield hangers when they no longer meet mission standards for aviation use
- Renovations of Tripler Army Medical Center
- Continue use/Renovations of Schofield Barracks Woodies for long term sustainability

The following is a summary of FY17 undertakings (as defined, NHPA 54 U.S.C. §300320) that may require cultural resources consultation:

USAG-HI FY17 Adjusted 1-N List

2017 Proposed Priority	Project Number	Project Description	Installation / Location	Category
		COMPANY OPERATIONS FACILITIES		
1	67176	IBCT Operation Facilities Phase 2A (COFs) - (9000 Block)	Schofield Barracks	COF
2	76905	CAB: COFs	Wheeler Army Airfield	COF
3	76598	Division Complex Phase 1C (BN, COFs, Band) (Possible R&M for existing facility)?	Schofield Barracks	COF
4	52264	B-Quad OPS (Bldg 155) - Rewrite/Combine/Modify (R&M)	Schofield Barracks	COF
5	67447	D-Quad OPs (Quad D Opns 449, 452) - Rewrite/Combine/Modify (R&M)	Schofield Barracks	COF
7	67964	EAB Complex (FS 10 - COFs) - FS Flats - Located with Motorpool PN 67188 or to SB?	Fort Shafter	COF
		BATTALION OPERATIONS FACILITIES		
1	82286	IBCT Brigade Complex Phase 1A (Consolidated BDE, 3 BN_HQ)	Schofield Barracks	BN
		8TH THEATER SUSTAINMENT COMMAND		
9	67188	Vehicle Maintenance Shop (FS Motorpool) - Currently FS Flats - Possible Move to FS Proper	Fort Shafter	TEMF

COMBAT AVIATION BRIGADE				
2	52203	CAB: Vehicle Maintenance Shop Phase (control tower, Taxiway, Aircraft Rinse Facility)	Wheeler Army Airfield	RW Parking
3	76897	CAB: 209th ASB Hangar	Wheeler Army Air Field	Hangar
4	75364	CAB Facilities Ph 3 (GSAB Hangar)	Wheeler Army Airfield	Hangar
5	78340	Combat Aviation Brigade Phase 16, Dining Facility	Wheeler Army Airfield	Dining
6	76898	CAB: 2-25 Assault Hangar	Wheeler Army Airfield	Hangar
2	76589	Combat Aviation Brigade Phase 12, Brigade/Battalion HQ	Wheeler Army Airfield	BN
BASOPS - UTILITIES				
1	62027	Breach Ku Tree Dam - (HQ/FRP/R&M Funded?)	Schofield Barracks	NR Safety issue
2	67257	Upgrade Water System (Well, Tank) - Convert to (1) water project for Privatizing	Fort Shafter	Water Source Potable
	NEW	(ADD) Road Project(s) to improve Road Network		
	NEW	(ADD) Acquisition Project for Easement or Land from Kunia Road out to GTA Footprint		
	90901	(ADD) Underground Electrical Lines	Schofield Barracks	
	90900	(ADD) Upgrade Water System	Schofield Barracks	
BASOPS - MWR - CHILD DEVELOPMENT CENTERS/FITNESS CENTERS/LIBRARIES				
7	57634	Education Center w/ Library - (Assigned to DHR for proponency)	Fort Shafter	Library
8	58570	Physical Fitness Center	Wheeler Army Airfield	Phy Fitness
9	59417	Physical Fitness Center - (Possible R&M Project)	Tripler Army Medical Center	Phy Fitness
BASOPS - OTHER - PARKING STRUCTURES/SOLDIER SUPPORT CENTERS, ETC.				
4	60058	Parking Structure Quad D - No Deficits for Parking - Need to Check Catcodes/Algoythm	Schofield Barracks	Non Org Parking
12	60057	Parking Structure, Quad F	Schofield Barracks	Non Org Parking

TACTICAL EQUIPMENT MAINTENANCE FACILITIES (TEMFS)				
1	76900	CAB: Large TEMF (Includes ORG Parking)	Wheeler Army Airfield	TEMF
2	76902	CAB: Large TEMF, Bde/Bn HQ, Parking Structure	Wheeler Army Airfield	TEMF
3	52582	IBCT Complex Phase 1 (3BCT motorpool w/Utilities)	Schofield Barracks	TEMF
4	67114	IBCT Vehicle Maintenance Shop Phase 2 (3BCT 2BN Motorpool)	Schofield Barracks	TEMF
5	76591	IBCT Complex Phase 3 (3BCT 2BN Motorpool)	Schofield Barracks	TEMF
6	76580	IBCT Vehicle Maintenance Shop Phase 4 (3BCT Motorpool)	Schofield Barracks	TEMF
7	76581	IBCT Vehicle Maintenance Shop Phase 5 (3BCT Motorpool)	Schofield Barracks	TEMF
8	52577	Division Complex Phase 1A (Motorpool)	Schofield Barracks	TEMF
9	56915	Sustainment Brigade Facilities (8th TSC) (Motorpool) HQ STB	Schofield Barracks	TEMF
10	NEW	(ADD) HHC & 65 BEB/2 IBCT Motorpool (Large)	Schofield Barracks	
11	NEW	(ADD) 1-21 IN/2 IBCT Motorpool (Small)	Schofield Barracks	
12	NEW	(ADD)1-27 IN/2 IBCT Motorpool (Small)	Schofield Barracks	
13	NEW	(ADD)2-14 CAV/2 IBCT Motorpool (Medium)	Schofield Barracks	
14	NEW	(ADD) 2-11 FA/2 IBCT Motorpool (Medium)	Schofield Barracks	
25TH ID PROJECTS				
		(ADD) Bldg 580 R&M Project - Use Bldg 1492/2091/3004 as swing space		
RANGE PROJECTS				
	NEW	(ADD) Drum Road Repair	Schofield Barracks	
	NEW	(ADD) Top of the World	Schofield Barracks	
	NEW	(ADD) Fire Break Road	Schofield Barracks	
BASOPS - ACCESS CONTROL POINTS (ACP'S)				
3	57957	Access Control Buckner Gate (FS Main Gate)	Fort Shafter	Access
5	78354	2nd Access Road	Tripler Army Medical Center	Access
BASOPS - FIRE STATIONS				
1	59529	Fire Station	Tripler Army Medical Center	Fire
2	63010	Fire Station	Wheeler Army Airfield	Fire Station

		ENLISTED UNACCOMPANIED PERSONNEL HOUSING		
1	57394	Barracks	Schofield Barracks	Enlisted BKS
4	52270	Barracks	Tripler Army Medical Center	Enlisted BKS
6	86421	Barracks	Schofield Barracks	Enlisted BKS
		TSS PROJECTS - NON MISSION-USARPAC/BASOPS-IMCOM		
4	66145	Infantry Squad Battle Course	Schofield Barracks	Infantry Squad Battle Course
		UNSPECIFIED MINOR MILITARY CONSTRUCTION ARMY (UMMCA)		
	NEW	TAVHAW - Ammo Storage Facility - UMMCA - South Range	Schofield Barracks/GTA	

5. STANDARD OPERATING PROCEDURES

5.1. SOP 1: Compliance Procedures for NHPA Section 106

Introduction

The National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR §800, outline a systematic process for review and consideration of historic properties when planning and executing undertakings. If National Environmental Policy Act (NEPA) procedures are required, then compliance for both may occur simultaneously.

Preservation of historic properties is encouraged, but not a mandated outcome, of the Section 106 process. Instead, the Section 106 process provides for consideration of alternatives and allows the public and other stakeholders an opportunity to comment on federal undertakings that have the potential to affect historic properties. It is important that the Section 106 process be initiated early in the project planning process in order to allow sufficient consideration of a reasonable range of options.

Implementing Authorities

- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108)
- Section 106 implementing regulations (36 CFR §800)
- National Environmental Policy Act (42 U.S.C. §4321)
- Army regulations for implementing NEPA (32 CFR §651)
- Army Regulation 200-1: Environmental Protection and Enhancement

Important Concepts

a) Undertaking:

As defined by 36 CFR §800.16(y), an undertaking is a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to state or local regulations administered pursuant to a delegation or approval by a Federal agency. The Cultural Resources Manager (CRM) evaluates projects and activities planned for implementation on lands owned, managed, or utilized by USAG-HI to determine if they meet this definition of an undertaking.

b) Effect:

Alteration to the characteristics of a historic property that qualify it for inclusion in, or eligibility for, the National Register of Historic Places (36 CFR §800.16(i)).

c) Adequate Opportunity to Comment:

- i) While the Hawai'i State Historic Preservation Division (SHPD) must be afforded a 30-day review period for most findings of effect and eligibility determinations (36 CFR §800.3(c)(4)), there is no formal timeline associated with Section 106 consultation to resolve Adverse Effects. The Army is expected to provide a reasonable amount of time and interaction with the SHPD to appropriately resolve situations of Adverse Effect (36 CFR §800.2(a)(4)).
- ii) Section 106 requires that Federal agencies offer the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on all proposed undertakings. The process defined in 36 CFR §800 provides that opportunity even though the ACHP does not directly participate in

the majority of consultations. The Army must specifically notify the ACHP of a finding of adverse effect (36 CFR §800.6(a)(1)) and offer the opportunity to participate in the consultation. The ACHP has 15-days to join in the consultation or decline participation.

Federal agencies shall also seek and consider the views of the public, as well as Native Hawaiian Organizations (NHOs), in a manner that reflects the nature and complexity of an undertaking and its effects on historic properties pursuant to 36 CFR §800.2(d)(2). In disseminating information to the public, an Agency is permitted to use existing public information portals established to comply with other planning and environmental reviews.

d) Historic Property:

Historic Property includes all properties that meet the criteria for listing in the National Register of Historic Places (NRHP). This determination is made by the Federal agency official, and requires SHPD concurrence.

Standard Section 106 4-Step Process

Army responsibilities in these regulations follow a general 4-Step sequence:

- I. Initiate Section 106 Process
- II. Identify Historic Properties
- III. Assess Effects
- IV. Resolve Adverse Effects

The steps in the process may be combined in correspondence with SHPD and consulting parties, or may be addressed individually. SHPD has 30 days to respond to each finding or determination made by the federal agency.

Program Alternatives and Options

The regulations allow for the development of several different kinds of alternate processes to the standard Section 106 consultation process. There are a number of these Program Alternatives in effect at USAG-HI (see ICRMP section 6.4). The CRM determines which existing programmatic agreements and/or program alternatives may apply to a given undertaking.

Participants in NHPA Section 106 Process

a) Proponent

The proponent is responsible for contacting the CRM ***as early as possible in the planning process***. Early involvement of the CRM is a specific requirement of the implementing regulations for NHPA, AR 200-1, and Army regulations for implementing NEPA. Timely review of proposed projects by the CRM will allow USAG-HI time to identify and resolve cultural resources issues in a timely and efficient manner. In many instances, it is the proponent's responsibility to program funding for cultural resources surveys, evaluations, and mitigation measures. Early identification of these needs is crucial for proper project budgeting.

Proponent responsibilities:

- Notification to the CRM of a proposed action or undertaking for review
- Participation in defining the Area of Potential Effects (APE)
- Funding and support for identification of historic properties, finding of effect, and implementation of mitigation measures incorporated into project approvals
- Supply information needed by the CRM for official correspondence

- Assure that NEPA and NHPA compliance are properly coordinated
- Assure that any restrictions or agreement stipulations are incorporated into project designs, contracts, construction inspections, SOPs, etc.
- Keep written record of Section 106 completion and any resulting conditions on the project;
- Notify CRM of any material change to the project scale, scope, design parameters, timing, or other circumstances
- Notify the Environmental Division Chief, CRM, and NEPA Program Manager when the implementation of the project is not in accord with or lacking any of the provisions upon which the Section 106 resolution depends

b) Cultural Resources Manager (CRM)

The CRM, representing the Garrison Commander, is responsible for facilitating Section 106 compliance and consideration of cultural resources. The CRM is responsible for oversight of the Section 106 compliance process; preparing the proper finding of effect; and for managing consultation with external agencies, organizations, and interested individuals.

CRM responsibilities:

- Review pertinent project planning documents for proposed or possible undertakings at early and subsequent stages of planning to identify cultural resource issues, applicable procedures, or needs for further information gathering, and consultations to complete Section 106 responsibilities.
- Assist proponents in defining appropriate APE for undertakings.
- Inform proponent of any known historic properties in or near the APE, and make initial assessment regarding additional identification efforts needed to support a finding of effect.
- Provide direction regarding alternative procedures and options for achieving compliance with Section 106 for projects under consideration. The CRM shall prepare the appropriate finding of effect.
- Request from proponents additional technical project information as needed for official correspondence with SHPD, the ACHP, consulting parties, or other interested parties.
- Draft official correspondence with SHPD, ACHP, consulting parties, or other interested parties.
- Coordinate consultations involving NHOs, SHPD, ACHP, other consulting parties, or other interested parties.
- Coordinate Section 106 consultation with NEPA review, as appropriate.

c) Advisory Council on Historic Preservation (ACHP) is an independent federal agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy. The ACHP is composed of twenty-three statutorily designated members and a small professional staff with offices in Washington, D.C (<http://www.achp.gov/aboutachp.html>)

d) State Historic Preservation Officers (SHPO) administer the national historic preservation program at the State level, review National Register of Historic Places nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with Federal agencies during Section 106 review. SHPOs are designated by the governor of their respective State or territory (<http://www.achp.gov/shpo.html>). The DLNR Chair is the SHPO for the State of Hawai'i, supported by the professional staff in the State Historic Preservation Division (SHPD).

e) Native Hawaiian Organizations are organizations that serve and represent the interests of Native Hawaiians, have a primary and stated purpose of providing services to Native Hawaiians, and have

expertise in Native Hawaiian affairs (DoDI 4710.03). The term "Native Hawaiians" means any individual who is a descendent of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawai'i (Public Law 103-150).

- f) **Interested Parties:** may include individuals or organizations with a demonstrated interest in the undertaking, including a legal or economic interest, or who are concerned with the undertaking's effects on historic properties (<http://www.achp.gov/apptoolkit.html>).

Section 106 Procedure

I. Initiate Section 106 Process

Establish the Undertaking

Determine whether the undertaking is the type of activity that has the potential to affect historic properties, including physical changes such as modification of buildings or land disturbance, or by indirect effects of noise, vibration or visual intrusions. The proponent organization is generally responsible for ensuring that undertakings comply with Section 106 of the NHPA, for funding measures needed to establish compliance, and for ensuring that compliance documentation is part of the administrative record pertinent to the undertaking. AR 200-1 defines proponent as "the unit, element, or organization that is responsible for initiating and/or carrying out the proposed action." Proponent responsibilities with respect to environmental reviews are noted in 32 CFR §651.4(q).

Identify Consulting Parties

The Army shall identify the appropriate points for seeking public input and for notifying the public of proposed actions. The Army regularly consults with the SHPD, NHOs, individuals and organizations with expressed interest in kinds of undertakings or the areas within which the undertakings are conducted. The ACHP participates in some consultations, especially for those that have a finding of Adverse Effects. The ACHP frequently chooses not to participate unless specifically requested by one of the consulting parties or by the Army.

II. Identify Historic Properties

Defining the APE

The APE is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." (36 CFR §800.16(d)). The CRM is responsible for coordinating with appropriate parties to identify the APE, which include but are not limited to, the SHPD, project managers, engineers and proponents of the undertaking. The CRM may request additional documentation for the proposed project under review to accurately determine the APE. The size of the APE is of sufficient size to encompass potential direct and indirect effects.

Identifying Historic Properties within the APE

The CRM will determine whether any historic properties are already known within the APE. In consultation with SHPD as needed, the CRM will determine if further measures are needed to complete a reasonable and good faith effort to locate and document historic properties that may be affected by specified undertakings. The proponent may need to assist in providing resources to carry out the required identification measures.

AR 200-1 6-4(9), states "Treat (assume) that all historic sites are eligible (that is, off-limits) until the SHPO concurs with the federal finding of non-eligible." AR 200-1 6-4(9) further stipulates "Nominate...only those properties that the Army plans to transfer out of Federal management through

privatization efforts. Nominate other properties only when justified by exceptional circumstances.” AR 200-1 1-5(e) identifies the Assistant Secretary of the Army for Installations and the Environment as the Army's senior policy level official for historic preservation and as the Federal Preservation Officer for oversight and coordination of Army Activities under NHPA, including approving and signing Army National Register of Historic Places nominations for Federally-owned or -controlled historic properties. Unless there is an unresolvable dispute, the eligibility of a property is settled through a determination documented by the Army, and concurrence (or no objection) from the SHPO. Disputes as to eligibility may be decided by the Keeper of the National Register within 45 days (36 CFR 63.2(d)). If the SHPO does not respond to a determination of eligibility within 30 days, the Army can proceed to assessing the effects of the undertaking.

III. Assess Effects

The Army will review the information regarding the proposed undertaking along with the information regarding historic properties in the APE and make one of several findings. The Army will send the finding to the SHPD and other consulting parties for review. The table below summarizes the findings of effect, information that must be available to consulting parties, and administrative constraints. The Federal agency must consult with SHPD to obtain concurrence. Concerns raised by consulting parties will be taken into account by the Federal agency.

No Historic Properties Affected (NHPA). This finding is appropriate if the steps to identify historic properties confirm that there are no historic properties within the APE. This finding is also appropriate in the circumstance that there are historic properties within the APE, but the undertaking as proposed will not affect them (36 CFR 800.4(d)(1)). The SHPD and consulting parties should be notified of the finding and the information supporting it. If SHPD concurs with the finding or does not object within thirty days, the Army may document the response and implement the undertaking with no further responsibilities under Section 106 of the NHPA. Comments received from other consulting parties within the thirty day review period will be taken into account by the Army.

No Adverse Effect. This finding is appropriate in circumstances where there are historic properties within the APE but the undertaking will not adversely effect those elements that make the properties eligible for the NRHP. For some undertakings, this finding may be dependent on specified conditions that become binding commitments. A finding of No Adverse Effect may be appropriately applied to rehabilitation of historic buildings, for instance, if that rehabilitation is required to conform to the Standards for Rehabilitation promulgated by the Secretary of the Interior. Conditions attached to the undertaking must be aimed at AVOIDING adverse effect, not at mitigation of or compensation for adverse effect. The Army must notify the SHPD and consulting parties of the finding and provide the information supporting it. If SHPD concurs with the finding or there are no requests for additional information submitted within thirty days, the Army may document the response and implement the undertaking with no further responsibilities under Section 106 of the NHPA. Comments received from other consulting parties within the thirty day review period will be taken into account by the Army.

Adverse Effect. This finding is appropriate if the proposed undertaking will cause or is likely to cause adverse effect to one or more historic properties. Adverse Effect is a change in the character or use of a historic property and its setting that diminishes any of the aspects of integrity of the characteristics that qualify the property for the National Register of Historic Places.

Findings of Effect, Supporting Information, Completion of Process				
Army Finding	Criteria	Supporting Information	Response period	Completion or Resolution
No Historic Properties Affected NHPA	Either No historic properties in APE OR Historic Properties present but not affected by undertaking	<ul style="list-style-type: none"> • Description of Undertaking; • APE; • Steps taken to Identify Historic Properties • Basis for Finding no historic properties, or no effects to historic properties 36 CFR 800.11(d)	30 days for SHPD respond once complete information is received. If additional information is requested, there are no longer set timelines. Consulting parties must respond within 30 days in order to have their comments considered.	Letter of concurrence from SHPD, or MFR documenting no timely response
No Adverse Effect NAE	Historic Properties present or likely within the APE, but the undertaking will not cause adverse effects; or conditions imposed on the undertaking successfully AVOID adverse effect (often rehabilitation of historic buildings consistent with Secretary of the Interior's Standards)	<ul style="list-style-type: none"> • Description of undertaking; • APE; • Steps taken to Identify Historic Properties; • Description of the Historic Properties, including the characteristics that qualify them for the NRHP. • Explanation of how the Criteria of Adverse Effect were found applicable or not applicable (including conditions to avoid, minimize or mitigate Adverse Effects) • Summaries of the views of consulting parties and the public. 36 CFR 800.11(e)	30 days for SHPD respond once complete information is received. If additional information is requested, there are no longer set timelines. Consulting parties must respond within 30 days in order to have their comments considered.	Letter of concurrence from SHPD, or MFR documenting no timely objections.

<p>Adverse Effect</p> <p>AE</p>	<p>Historic Properties present; at least one will suffer unavoidable adverse effects</p>	<ul style="list-style-type: none"> • Description of undertaking; • APE; • Steps taken to Identify Historic Properties; • Description of the Historic Properties, including the characteristics that qualify them for the NRHP. • Explanation of how the Criteria of Adverse Effect were found applicable or not applicable (including conditions to avoid, minimize or mitigate Adverse Effects) • Summaries of the views of consulting parties and the public. <p>36 CFR 800.11(e)</p>		<p>Completion by implementing MOA, or by requesting ACHP formal comments after terminating unsuccessful consultations</p>
<p>Consultations to Resolve Finding of Adverse Effect</p>			<p>No Formal time limit. Consultations continue until successful agreement (MOA) or one party terminates.</p>	<p>Completion by implementing MOA, or by requesting ACHP formal comments after terminating unsuccessful consultation</p>

Table 3: Findings of Effect, Supporting Information, Completion of Process

IV. Resolve Adverse Effects

If the Army in consultation with SHPD determines that the undertaking will result in a finding of adverse effect to an historic property, then the CRM consults with the SHPD on behalf of the Garrison Commander (GC), including the project proponent and other consulting parties in reviewing project alternatives to avoid, minimize, and/or mitigate the adverse effects. The goal of this consultation is to resolve adverse effects.

The following list provides some examples of adverse effects:

- Physical destruction, demolition, or damage to all or part of an historic property;
- Alterations to the property that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR §68). Alterations may include: restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, 9/11 Security Improvements, installation of green energy technology, and provisions for handicapped accessibility;
- Relocation of the property;
- Change in the property's use or physical features that alter the setting;
- Neglect of the property that leads to deterioration (except when the neglect and deterioration are recognized qualities of the property's religious and cultural significance to an indigenous organization);
- Transfer or lease of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance;
- Introduction of visual, atmospheric, or audible elements that indirectly affect the integrity of historic property, such as elimination of open space or a scenic view and/or introduction of a visual element that is incompatible, out of scale, in great contrast, or out of character with the surrounding area; and
- Cumulative impacts in the past, present, and reasonably foreseeable future, which may be individually minor but collectively significant.

Consulting to Resolve Adverse Effects

For projects in which the finding of adverse effect cannot be avoided, the CRM initiates consultations to resolve adverse effects. The Army will notify the ACHP of the finding of adverse effect and invite the ACHP to participate in consultations. The Army consults with SHPO and other consulting parties to reach agreement on measures to resolve the adverse effects. Successful consultations will be documented in a Memorandum of Agreement (MOA).

The IMCOM and U.S. Army Environmental Command (USAEC) must review and approve a draft of the MOA to assure legal and technical sufficiency and consistency with Department of the Army policy. This review and approval must be completed before the Garrison Commander signs the MOA as the Agency Official for the Army. When all signatory parties sign the MOA and a copy of the executed MOA is sent to the ACHP and the signatory parties, then Section 106 is complete. The MOA is a legally binding document.

The project proponent is responsible for ensuring its activities are implemented as stipulated in the signed MOA (or other agreement document), ensuring that the stipulations are properly incorporated into subsequent contracts, project management inspections, budgets, and performance schedules. The project proponent will provide the CRM with evidence that the agreed upon stipulations have in fact been properly incorporated in project implementation documents. If project proponents find that any aspect of the project is not implemented in accordance with the binding stipulations, the proponent

must promptly notify the Environmental Division Chief, NEPA Program Manager, and CRM for review and consideration, and may be subject to further Section 106 review and consultation.

Terminating Consultation

If the USAG-HI GC, SHPD, and ACHP (if participating) fail to agree on how to resolve adverse effects, the parties may terminate consultation. If termination occurs, the ACHP will submit its final advisory comments within 45 days to the Secretary of the Army as Head of the Federal Agency, and the Army must take into account the ACHP's comments in reaching a final decision on the undertaking. The Army shall prepare a summary of the final decision on the undertaking that documents the rationale for the decision and evidence that the Army considered the comments from the ACHP. This final decision document will be reviewed by IMCOM and ACSIM and then submitted to the ACHP and other consulting parties.

Coordinating the NEPA Process with NHPA Section 106 Regulations

The CRM may use the process and documentation required for the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) to comply with Section 106 in lieu of the procedures set forth in this SOP and stipulated in 36 CFR § 800.3-800.6; however, the SHPD and ACHP must be notified when USAG-HI intends to combine NEPA and Section 106. When combining NEPA and Section 106, Federal agencies should consider their Section 106 responsibilities early in the NEPA process, and plan their public participation, analysis, and review so they can meet the purposes and requirements of both statutes. In coordination with the NEPA program manager, the CRM ensures that preparation of an EA or EIS includes proper scoping, identification of historic properties, assessment of effects upon them, and consultation leading to resolution of any adverse effects.

Guidance for National Historic Landmarks

NHPA Section 110(f) (54 U.S.C. 306107) requires the Army to undertake planning and actions to minimize harm to National Historic Landmarks (NHLs) and provide reasonable opportunity for the ACHP to comment on undertakings that adversely affect NHLs. When an undertaking affecting an NHL requires consultation, the CRM, acting on behalf of the GC, will notify the National Park Service (NPS) and invite the NPS to participate in the consultation if the proposed undertaking may result in a finding of adverse effect pursuant to 36 CFR 800.10(c).

Guidance for consideration of places with religious and cultural significance for Native Hawaiian Organizations

Places of cultural and religious significance to a NHO may be accorded certain standing and consideration. NHPA Section 106 (36 CFR §800) requires Federal agencies to consult with NHOs in order to identify properties of traditional religious and cultural importance that may be affected by a proposed undertaking and to gather information from NHOs about these properties while also acknowledging that "Indian tribes and NHOs possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them" (36 CFR § 800(4)(c)(1)). Properties of religious and cultural importance to NHOs will be evaluated for NRHP eligibility and effects of the undertaking as outlined above.

5.2. SOP 2: Identify and Evaluate Historic Properties

Introduction

NHPA requires the Army to identify and evaluate buildings, structures, objects, districts, and sites under the agency's jurisdiction or control, or that may be affected by agency actions that are eligible for listing in the NRHP. Priorities for surveys at USAG-HI are determined annually based on available funding, projected mission impacts, and proposed undertakings.

Implementing Regulations

- NHPA (54 U.S.C. 306101(a) and 306102)
- National Register of Historic Places (NRHP) (54 U.S.C. 302101)
- Secretary of the Interior's Professional Qualification Standards (36 CFR §61)
- AR 200-1: Environmental Protection and Enhancement

Important Concepts

The goal of **identification** is to establish whether the area inspected contains the types of properties that may be eligible for the NRHP.

The purpose of **evaluation** is to collect sufficient information about identified properties to determine if they are eligible for the NRHP, including identification of the characteristics that contribute to eligibility and the condition and integrity of those characteristics. Evaluation leads to a determination of eligibility (DOE). USAG-HI uses the information provided by surveys to make formal determinations of eligibility for the NRHP which are submitted to SHPD for concurrence. Evaluation requires an assessment of collected data against the NRHP Criteria. Priority for evaluations is determined by projected mission impacts and anticipated undertakings.

NRHP Criteria

To be eligible for the NRHP, a property must be significant in American history, architecture, archeology, engineering, or culture. The property must meet one or more of the four National Register criteria:

Criterion A: Associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B: Associated with the lives of significant persons in our past; or

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: Yield or may be likely to yield, information important in history or prehistory.

The property must also possess integrity of location, design, setting, materials, workmanship, feeling, and/or association.

USAG-HI maintains an Access Inventory database of eligible and non-eligible archaeological sites and other properties (see Appendix D for USAG-HI Inventory). Locations of archaeological sites are maintained in a GIS. Hard copy site files are also maintained in the USAG-HI Cultural Resources Section. Historic building information is maintained by USAG-HI Real Property Office and tracked in GFEBs and other Real Property databases (see Appendix D for USAG-HI Inventory).

Procedures

Specific procedures for identification and evaluation surveys are determined by the nature of the resource and the purpose of the survey. For most property types, particularly archaeological sites, minimum information collected for evaluation of each property should include time period, function, ethnic affiliation, location (coordinates, map), measured area of property, boundaries and justification for boundaries, property description including condition and integrity, representative photographs, and a scaled site plan map. This minimum information was not consistently collected for all sites tracked in the USAG-HI Inventory, and in some cases additional documentation may be required. Specific site documentation requirements are established in the work plans developed for each project.

5.3. SOP 3: Unanticipated Discovery of Historic Properties and Inadvertent Discovery of Human Remains and/or Cultural Items

Introduction

The USAG-HI Cultural Resources Section is engaged in continual efforts to survey and inventory Army lands; however, in the daily conduct of Army operations at USAG-HI, there is always the possibility of discovering previously unknown or unidentified cultural resources. Erosion by wind or water may also result in the unanticipated discovery of historic properties and/or human remains and cultural objects.

The appropriate response to an unanticipated or inadvertent discovery varies depending on the circumstances of the discovery, and the manner in which the activity leading to the discovery may have incorporated advance planning for discoveries in its implementation. The most important of these factors include:

- Whether the activity has a formal agreement in place with stipulations addressing discoveries
- Whether the activity has a formal agreement in place, but without specific stipulations addressing discoveries.
- Whether the discovery includes cultural items as defined by NAGPRA
- Whether the discovery includes human remains or other circumstances that require attention from law enforcement personnel
- Whether there is no activity or undertaking in place that leads to the discovery.

The CRM should be involved in the planning of undertakings in order to assess the potential for the discovery of Native Hawaiian burials and archaeological sites and to assure that appropriate measures to respond to such discoveries have been incorporated into the approvals and implementation plans for those undertakings. The CRM should also be identified as a point-of-contact to be notified immediately if human remains, archaeological deposits, or other culturally significant materials are inadvertently discovered on installation property.

Laws, Implementing Regulations, and Guidance

- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- Native American Graves Protection and Repatriation Act (25 U.S.C §3001-3013) and implementing regulations (43 CFR §10)
- American Indian Religious Freedom Act (42 U.S.C. § 1996-1996a)
- Archaeological Resources Protection Act (16 U.S.C. § 470aa-470ll) and implementing regulations (43 CFR §7)
- National Environmental Policy Act (42 U.S.C. § 4321-4370c) and Army regulations for implementing NEPA (32 CFR §651)
- DoD Instruction 4710.03: Consultation with Native Hawaiian Organizations (NHOs)
- AR 200-1: Environmental Protection and Enhancement

Each statute mandates compliance with independent requirements; therefore it is important to remember that compliance with one statutory requirement may not satisfy all requirements.

Important Concepts

Historic property, as defined by NHPA (54 U.S.C. §300101 et seq), is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP).

Archaeological resource, as defined by Section 3(1) of ARPA (16 U.S.C. 470bb[1]), includes “Any material remains of human life or activities that are at least 100 years old and that are of archaeological interest.”

Cultural item. According to Section 2(3) of NAGPRA (25 U.S.C. 3001[3]), cultural items include human remains, associated and unassociated funerary remains, sacred objects, and objects of cultural patrimony.

Inadvertent discovery is the unanticipated encounter or detection of human remains, funerary objects, sacred objects, or objects of cultural patrimony found under or on the surface of Federal or tribal lands pursuant to section 3 (d) of NAGPRA (43 CFR §10.2 (g)(4)).

Unanticipated discovery, as defined by 36 CFR §800.6(c)(6), is the “subsequent discovery or identification of additional historic properties affected by the undertaking.”

Post-review discovery occurs when historic properties are discovered, or when unanticipated effects on historic properties occur, after the section 106 process is complete without establishing a process pursuant to 36 CFR §800.14(b) that governs actions to be taken if and when historic properties are discovered during the implementation of an undertaking (36 CFR §800.13).

ARPA and NAGPRA Statements for inclusion with Permits, Leases, and Contracts

The following clauses shall be included in all contracts that have the potential to affect historic properties, archaeological resources or cultural items:

“It is a felony offense, punishable by a fine up to \$20,000 and imprisonment for up to one year, for any person who attempts to or excavates, removes, damages, or otherwise alters or defaces any resources located on [name of installation], or for any person to offer to or sell, purchase, transport, or receive any resource which was excavated or removed from Federal lands (Archaeological Resources Protection Act, 16 U.S.C. 470aa-470mm).”

- a. “If previously unidentified historical, archaeological, or cultural resources are found during construction operations, the contractor shall immediately suspend work in the area of the discovery and provide telephone notification to the agency official or their representative and to the USAG-HI Directorate of Public Works Environmental Division, Cultural Resources Manager (808-655-9709). The contractor must follow-up with written confirmation of the discovery to those same parties as soon as possible. Resources covered by this provision include, but are not limited to: human burials or skeletal remains; petroglyphs; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, stone paving, walls, or other constructed features; any indication of habitation, agriculture, or other human activities. The contractor shall not alter or disturb any discovery and shall cease all activities that may result in impact to or the destruction of discovered resources. The contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.”

Procedures

- I. **Discovery.** In the event that artifacts, human remains, bottles, rock carvings or paintings, tools, structures or portions thereof, graves or other archaeological resources not previously known are identified in the course of an activity, the discoverer shall immediately cease activity in the vicinity of the find, secure the area to ensure that no additional harm comes to the find, and notify the USAG-HI CRM.

- II. **Preliminary Assessment, Protection, and Verification.** When notified of an inadvertent discovery of human remains or other cultural items, the proponent, CRM, and/or Provost Marshall and Criminal Investigation Division (CID) will determine if the remains are:
 - 1) **Associated with a recent crime scene:** If, upon examination by the Provost Marshall and CID, the remains appear to be human and associated with a crime scene, then all activity will cease within an area reasonably needed to protect the site pending further investigation.
 - 2) **Remains are of Native Hawaiian origin:** If the remains are determined to be Native Hawaiian and not associated with a crime, the CRM must make a written field evaluation of the circumstances of the discovery, the condition and contents of the burial, including any associated artifacts, the primary context of the remains and any artifacts, and their antiquity and significance (see *Figure 1: National NAGPRA Guidance for Inadvertent Discoveries on Federal Lands*).
 - 3) **Remains are identified as non-human:** If the remains are determined to be non-human, then the CRM will determine if archaeological contexts are present that need to be evaluated pursuant to the NHPA.
 - 4) **Agreements:** If the activity that discovered the find has an applicable agreement document executed in accordance with Section 106 and/or NAGPRA, the Army shall follow the stipulations for Inadvertent or Unanticipated Discoveries established in those agreement documents.
 - 5) **No Agreements:** If the activity that discovered the find does not have an applicable agreement document, then USAG-HI will follow the requirements of 43 CFR § 10.4 and 36 CFR § 800.13 for post-review discovery, as appropriate.

- III. **Resumption of Activity.** The activity that resulted in the inadvertent discovery of Native Hawaiian human remains or cultural objects may
 - 1) resume thirty (30) days after certification by the GC of the receipt of the notification sent by the CRM; or
 - 2) activity may resume if the treatment is documented in a written binding agreement between the installation and affiliated NHOs that adopts a plan for stabilization and protection of the site with no removal of human remains and cultural objects, excavation or removal of the human remains or cultural objects, or their disposition to lineal descendants or NHOs with priority of custody.

Inadvertent Discoveries on Federal Lands After November 16, 1990

An *inadvertent* discovery is one for which no plan of action was developed prior to the discovery.

Notification

The person who makes the discovery must **immediately notify the responsible Federal official** by telephone and provide written confirmation to the responsible Federal official.

Stop Work

If the inadvertent discovery occurred in connection with an on-going activity, the person must **cease the activity** in the area of the inadvertent discovery and **make a reasonable effort to protect the human remains and other cultural items**.

Initiating Consultation

No later than three working days after receiving written confirmation of the notification, the responsible Federal agency official must **certify receipt of the notification**, and take immediate steps, if necessary, to **further secure and protect the human remains and other cultural items**. **NOTE:** activity that resulted in the discovery may resume thirty days after the Federal agency official certifies receipt of the notification.

The responsible Federal agency official must also **notify by telephone** (with written confirmation) and **initiate consultation** with **any known lineal descendant** and the **Indian tribes and Native Hawaiian organizations** –

- **who are or are likely to be culturally affiliated with the human remains and other cultural items;**
- **on whose aboriginal lands the remains and cultural items were discovered; and**
- **who are reasonably known to have a cultural relationship to the human remains and other cultural items.**

Consultation is initiated with a written notification. The written notification must propose a time and place for meetings or consultation.

During Consultation

The **purpose** of consultation is to **help the Federal agency determine who is entitled to custody** of the human remains and other cultural items under NAGPRA so that the disposition process can be completed, and to **discuss the Federal agency's proposed treatment** of the human remains and other cultural items pending disposition.

The Federal agency official must **provide in writing** –

- a list of all lineal descendants, Indian tribes, or Native Hawaiian organizations that are being, or have been, consulted; and
- an indication that additional documentation will be provided on request.

The Federal agency official **must request, as appropriate** –

- names and addresses of the Indian tribe official who will act as the tribe's representative in consultation;
- names and appropriate methods to contact lineal descendants;
- recommendations on how consultation should be conducted; and
- the kinds of cultural items that are considered to be unassociated funerary objects, sacred objects, or objects of cultural patrimony.

After Consultation – Written Plan of Action

The Federal agency official must prepare, approve, and sign a written plan of action. The plan of action must document the kinds of objects to be considered as cultural items; the planned treatment, care, and handling, including traditional treatment, of human remains and other cultural items; the planned archeological recording of the human remains and other cultural items; the kinds of analysis planned for each kind of object; and the nature of reports to be prepared.

The written plan of action must also include –

- the **specific information used to determine custody** of the human remains and other cultural items; and
- the **planned disposition** of the human remains and other cultural items.

Custody must be determined in accordance with 25 USC 3002 (a), "Priority of Ownership," and 43 CFR 10.6, "Priority of Custody."

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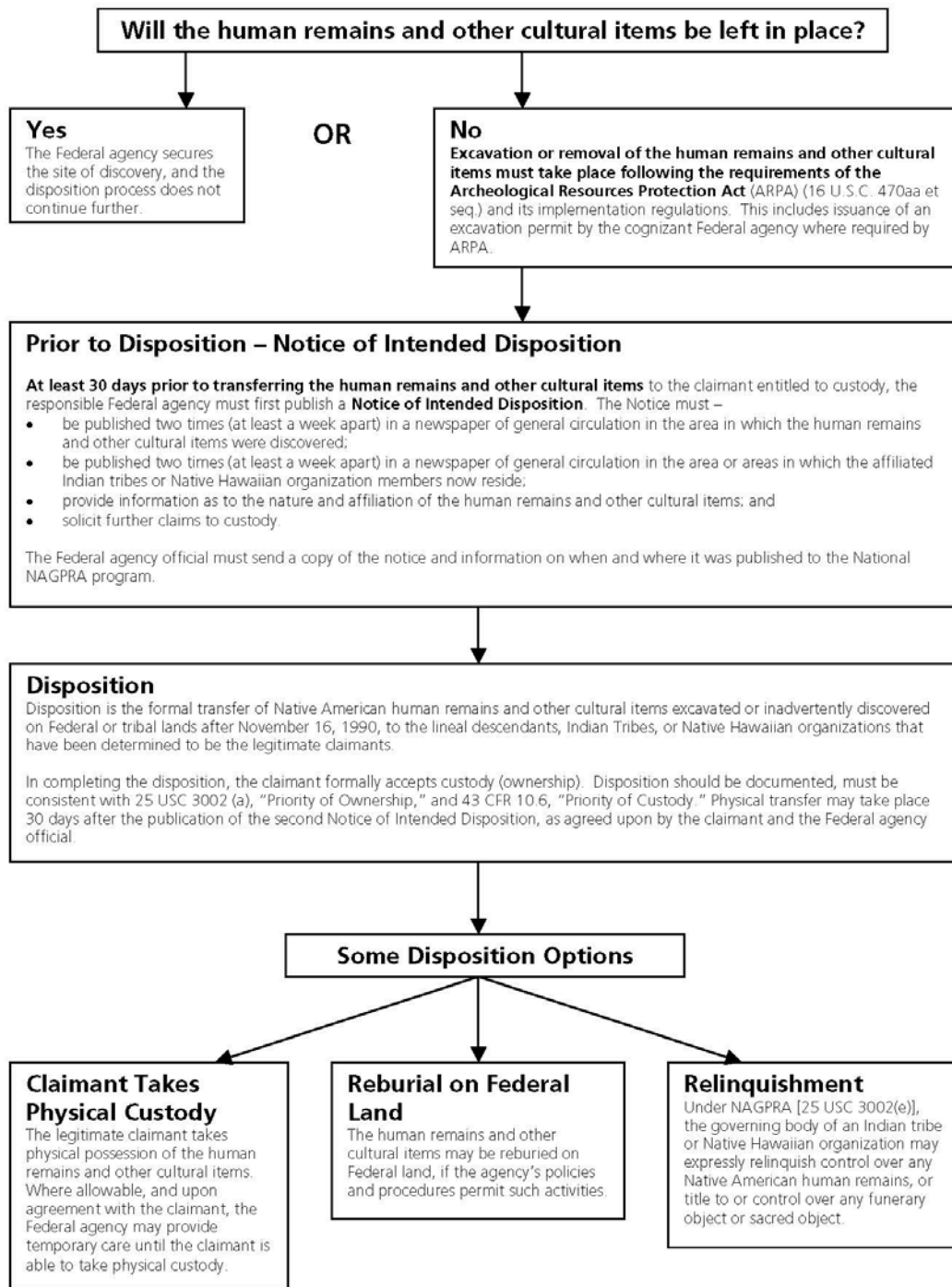


Figure 1: National NAGPRA Guidance for Inadvertent Discoveries on Federal Lands
(https://www.nps.gov/nagpra/TRAINING/Intentional_Excavations.pdf)

5.4. SOP 4: Emergency Situations

Introduction

This SOP describes a framework to ensure protection of cultural resources from unnecessary damage and emergency procedures in the event of an emergency situation, such as a major natural disaster or imminent threat.

Laws and Implementing Regulations

- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- Archaeological Resources Protection Act (16 U.S.C. § 470aa-470ll) and implementing regulations (43 CFR §7)
- Secretary of the Interior’s Standards for Treatment of Historic Properties (36 CFR §68)
- Waiver of Federal Agency Responsibilities Under Section 110 of the National Historic Preservation Act (36 CFR §78)
- AR 200-1: Environmental Protection and Enhancement

Important Concepts

Emergency situations, as defined by 36 CFR §800, allows for expedited review in the event of a disaster or emergency declared by the President, the Governor of a State, or another immediate threat to life or property where the agency has not developed procedures in advance.

USAG-HI will exercise feasible and prudent precautions to avoid and reduce the risk of damage to historic properties in the event of emergency responses. In cases where a historic property sustains damage as a result of those responses, the incident shall be reported and a reasonable effort shall be made to identify the responsible parties, if any, and to repair or replace the damaged resource or to mitigate the damage.

The project proponent or discoverer of the damaged historic properties is responsible for notifying the CRM immediately.

Emergencies

No requirement of this or any other SOP shall be used to delay immediate actions that are required in an emergency to protect health and human safety or avoid substantial loss of property. “Emergency” is defined here as an immediate and imminent threat to life, health, or property (36 CFR § 800.12).

In cases where it is determined by the onsite Federal Agency head, or designee, that an emergency exists, as defined above, all reasonable and prudent efforts shall be made to avoid or minimize harm to historic properties that may be caused by the implementation of emergency actions (36 CFR §78.3). In this case, a “Federal Agency Head” is defined as the highest administration official, or designee, representing the Federal agency during an emergency (36 CFR §78.2).

According to 36 CFR §800.12(d), rescue and salvage operations conducted in response to an immediate threat to life or property are exempt from the provisions of NHPA Section 106. Expedited review, where possible, is provided for in 36 CFR § 800.12 for undertakings initiated within 30 days of the declaration of an emergency by the appropriate authority. The agency may request an extension of the period of applicability for emergency procedures from the Council, or must consult with the SHPD under the normal process outlined in 36 CFR § 800.3 through 800.6. Once an emergency has been identified, the Federal

Agency head or designee shall notify the CRM as soon as possible. The CRM shall assess potential impacts to cultural resources, work with responders to avoid and protect cultural resources as possible, and ensure that the requirements of 36 CFR § 800.12 are followed if no prior plan is in place.

The requirements of Section 110 of the NHPA (54 U.S.C. 306101(a)) are likewise waived in the event of an emergency as follows:

“When a Federal Agency Head determines, under extraordinary circumstances, that there is an imminent threat of a major natural disaster or an imminent threat to national security such that an emergency action is necessary to the preservation of human life or property, and that such emergency action would be impeded if the Federal agency were to concurrently meet its historic preservation responsibilities under section 110 of the Act, that Federal Agency Head may immediately waive all or part of those responsibilities...” (36 CFR §78.3).

During an emergency situation when immediate repairs or building modifications are required, emergency work should be temporary and removable in case the work does not conform to the Secretary of the Interior’s Standards (36 CFR §68). Ideally, the CRM is notified before any replacement work takes place to evaluate the proposed changes and determine the necessary documentation requirements, if any. If changes to any elements of a historic building are unavoidable, the implementing activity must document the original condition and materials of the affected building elements with drawings, photographs, and written descriptions. Upon completion of all such work, the proponent will submit a brief written report to the CRM that describes the nature and location of the emergency repair or replacement.

5.5. SOP 5: NAGPRA: Planned Activities and Comprehensive Agreements

Introduction

USAG-HI must comply with the Native American Graves Protection and Repatriation Act (NAGPRA) when planning intentional excavations or archaeological activities that are likely to disturb cultural items. NAGPRA requires that Native Hawaiian human remains, associated funerary objects, sacred objects, and objects of cultural patrimony be excavated or removed only after consultation with lineal descendants or potentially affiliated Native Hawaiian organizations that have priority of custody over these items.

Implementing Regulations

- Native American Graves Protection and Repatriation Act (NAGPRA), ((25 U.S.C §3002 (3)(c)), 43 CFR §10)
- DoD Instruction 4710.03: Consultation with Native Hawaiian Organizations
- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)

Important Concepts

Intentional excavation is defined in 43 CFR §10.2(g)(3) as “the planned archeological removal of human remains, funerary objects, sacred objects, or objects of cultural patrimony found under or on the surface of Federal or tribal lands.”

Planned activity likely to disturb cultural items

The term “planned activity likely to disturb cultural items” encompasses any activity that has the potential to discover or disturb cultural items as defined by NAGPRA (Deputy Federal Preservation Officer 2016). It is not limited to excavations intended for archaeological purposes, though it may encompass those as well.

If a planned activity is also subject to NHPA Section 106, then consultation and any subsequent agreements under NHPA should be coordinated with the requirements of NAGPRA (43 CFR §10.3(c)(2) and §10.5). Compliance with NAGPRA does not absolve a federal agency from its responsibilities under NHPA or vice versa.

Intentional Excavation

Before issuing any approvals or permits for excavations that are likely to result in the discovery of Native Hawaiian human remains or cultural objects, the CRM must provide proper written notification to the NHOs that are likely to be culturally affiliated. This notice must describe the planned activity, its general location, the basis for the determination that human remains and cultural objects may be encountered during excavation, and the basis for the determination of likely custody pursuant to 43 CFR §10.6.

Treatment and Disposition: Native Hawaiian Human Remains

The treatment and disposition of any Native Hawaiian human remains and cultural items recovered from USAG-HI lands shall be determined in consultation with lineal descendants or culturally affiliated NHO(s) as required by 25 U.S.C. §3002 (3)(a), 43 CFR §10.3(2) and §10.4(d)(iv).

- The treatment, stabilization and protection regarding Native Hawaiian human remains and cultural items encountered during planned archaeological excavations are developed before the commencement of the project. Culturally affiliated NHOs are notified in writing regarding proposed consultation.
- An organization that wishes to make a claim of ownership of human remains or cultural items must be able to demonstrate an affiliation by a preponderance of evidence according to the criteria for the priority of custody specified in 25 U.S.C. §3002 (3)(a) and 43 CFR §10.6.
- The determination of an appropriate disposition for the human remains and/or cultural items shall be determined in consultation with lineal descendants or culturally affiliated NHOs.

Upon request, sacred objects and objects of cultural patrimony shall be returned where (a) The requesting party is the direct lineal descendant of an individual who owned the sacred object; (b) The requesting NHO can show that the object was owned or controlled by the organization; and/or (c) The requesting NHO can show that the sacred object was owned or controlled by a member thereof.

Prior to the disposition of human remains and cultural items to the lineal descendants or culturally affiliated NHO(s), USAG-HI must publish notices of the proposed disposition in local newspapers where the human remains and cultural objects were discovered and where lineal descendants or affiliated Native Hawaiian(s) currently reside.

If a single, legitimate claimant cannot be identified, consultation shall continue with the consulting organizations to consider possible alternatives for affiliation, treatment, and disposition.

Each restoration and reinternment shall require that USAG-HI provide an opportunity for appropriate Native Hawaiian religious ceremony or ceremonies pursuant to the American Indian Religious Freedom Act (AIRFA) [42 U.S.C. §1996-1996a], to the extent that is safe and feasible to do so.

The resolution of treatment and disposition issues must be documented in a written Plan of Action (POA) or Comprehensive Agreement (CA), pursuant to 43 CFR §10.3(2), 10.4(d)(2), and 10.5(e),(f) and Final Rule §10.7.

NAGPRA Plan of Action (POA) or Comprehensive Agreement (CA)

“Under the NAGPRA regulations (43 C.F.R. 10.3 and 10.5), a Federal agency must prepare, approve, and sign a POA if the agency intends to excavate or remove, or leave in place NAGPRA cultural items when these cultural items are exposed or are found already exposed, and does not wish for activity in the area of the exposed cultural items to halt. Excavating or removing, or leaving in place cultural items under a POA is known as an "intentional excavation." Exposing or finding already-exposed cultural items without a POA is known as an "inadvertent discovery." When a discovery occurs, any activity taking place in the area of the discovery must cease for 30 days. Under the regulations at 43 C.F.R. 10.4, the responsible agency official must initiate consultation on a discovery pursuant to section 10.5 of the regulations. Consultation, in turn, must result in an approved and signed POA (43 C.F.R. 10.5(e)). The regulations provide no exceptions to this rule. Thus, the agency must prepare, approve, and sign a POA even if no on-going activity is to occur. A POA must, at minimum, comply with the requirements at section 10.3(b)(1) of the regulations (which governs an "intentional excavation"). Following the effective date of the POA, exposing or finding already-exposed cultural items within the geographical area covered by the POA will

be an "intentional excavation," and will be excavated or removed, or left in place according to the terms of the POA" (National NAGPRA 2003).

Under 43 CFR §10.5, Federal agencies are encouraged to develop CAs where any undertaking or action on agency lands may affect NAGPRA cultural items. The purpose of these agreements is to address Army activities that could result in the intentional excavation or inadvertent discovery of human remains or other NAGPRA items. The CA will describe procedures for consulting with NHOs to determine custody, treatment, and disposition, thereby reducing project delays in the event of an inadvertent discovery.

Consultation is documented by (1) a written POA in accordance with 43 CFR §10.5(e) signed by the GC, or (2) a CA in accordance with 43 CFR §10.5(f) signed by the GC and official representatives of affiliated NHOs. Excavation or removal of cultural items may only proceed after consultation with lineal descendants or potentially affiliated NHO.

Dispute Resolution

Should any interested organization make a conflicting claim of cultural affiliation or dispute the methods of treatment or disposition of human remains and/or cultural objects as delineated herein, the GC shall notify the IMCOM—HQ and the USAEC. USAG-HI will continue consultation with the disputing parties, suggest that the disputing parties seek resolution among themselves, or refer the matter to the NAGPRA Review Committee in accordance with 43 CFR §10.17(b).

5.6. SOP 6: Archaeological Resources Protection Act of 1979 Compliance Process

Introduction

This SOP describes procedures for compliance with the Archaeological Resources Protection Act of 1979 (ARPA) and the final uniform regulations issued by the Department of Defense (32 CFR §229). ARPA protects archaeological sites and resources on public and tribal lands and describes what activities are considered violations of this regulation. ARPA also outlines the process of acquiring a permit for conducting archaeological research on, and conditions for removing artifacts from, these lands.

The law makes it a Federal felony for persons to excavate, remove, damage or otherwise deface any resource located on Federally-owned lands. The sale, purchase, or transfer of artifacts obtained in violation of the law is also a felony. The regulations contain definitions and guidelines for the enforcement of the act and set forth procedures and standards for the issuance of permits that are held as exceptions to the act.

Laws and Implementing Regulations

- Archaeological Resources Protection Act of 1979 (ARPA), Public Law 96-95; (93 Stat.721; 16 U.S.C. §470aa-II)
- Protection of Archaeological Resources: uniform regulations issued by the Department of Defense (32 CFR §229)

Important Concepts

- a) **Archaeological Resource:** ARPA and the implementing regulations define “archaeological resource” as any material remains of human life or activities that are at least 100 years of age and that are of archaeological interest (32 CFR §229.3(a)).
- b) **Federally owned lands:** ARPA defines “public lands” as those lands in which fee title is held by the United States (32 CFR §229.3(d)).
- c) Investigation of looting or vandalism of an archaeological site requires a systematic examination of the crime scene by both a law enforcement investigator and a professional archaeologist, whether the matter is handled criminally or civilly. A law enforcement officer is responsible for investigating violations of the law and, therefore, directs the archaeological crime scene investigation process. The archaeologist provides forensic expertise on archaeological resources for the crime scene investigation, and may be requested to assist in other activities, such as taking the crime scene photographs, helping with the crime scene sketch, or providing assistance in collecting the archaeological evidence. In cases where proof may be insufficient to obtain a criminal conviction under the Act, or where deemed otherwise advisable, USAG-HI, after coordination with the Office of the Staff Judge Advocate (OSJA), may choose to assess a Civil Penalty under the provisions of 32 CFR §229.15. This procedure is particularly applicable to violations of the excavation permit provisions to prevent damage to known archaeological sites.

ARPA Permit Procedures

Under 32 CFR §229 and AR 200-1, any person may apply for a permit to excavate and/or remove archaeological resources from public lands. While AR 200-1 designates the Garrison Commander as the federal land manager for purposes of ARPA, in practice the ARPA permit is also considered a real property transaction under the jurisdiction of the Army Corps of Engineers, District Engineer.

- ARPA prohibits anyone from excavating or removing an archaeological resource from Federal land or Indian land without a permit from the appropriate land management agency.
- The CRM, on behalf of the Garrison Commander (GC), shall consult with Native Hawaiian organizations (NHOs) in order to identify and locate archaeological sites of traditional religious and cultural importance, and notify NHOs of any ARPA permit that has the potential to affect these sites.
- Army activities should also be coordinated with legislative mandates found in the National Historic Preservation Act (NHPA), the Native American Graves Protection and Repatriation Act, (NAGPRA), and the National Environmental Policy Act (NEPA).
- While the legislation specifies Indian tribes, consultation is not necessarily restricted to Indian tribes and can include Alaska Native villages and NHOs.

Once the Army issues an ARPA permit, the permit holder is responsible for all conditions set forth in related documents such as a NAGPRA Plan of Action (POA) or Memorandum of Agreement (MOA) pertaining to the methods and techniques approved for the excavation. Excavation may be monitored for compliance by the CRM, NHOs, or other authority. Failure to comply with permit stipulations can result in revocation of the permit and prosecution under the law.

Procedures for ARPA Violation (unpermitted excavations)

An ARPA investigation begins when an Army official first suspects or discovers a violation, or receives a report of such from a third party. Information provided by a witness should include a signed narrative statement describing the exact location, specific activity, people and any vehicles involved. Witnesses to suspected criminal activity should contact the Federal law enforcement officer and the CRM. Upon notification of suspected criminal activity, both a Federal law enforcement official and the CRM should visit the suspected crime scene as soon as possible.

Garrison law enforcement personnel, Criminal Investigation Division (CID), Office of the Staff Judge Advocate (OSJA), and the USAG-HI Cultural Resources Section should ensure that there are personnel in each of these capacities that have received training in the technical procedures for effective investigation, documentation, and prosecution of ARPA violations.

5.7. SOP 7: Native Hawaiian Consultation

Introduction

Native Hawaiian consultation is defined in DoDI 4710.03 as “seeking, discussing, and considering the views of other participants and, when feasible, seeking a mutually acceptable understanding regarding the matters at hand” and giving that information serious consideration in the decision-making process. “Consultation is most effective when conducted in the context of an ongoing relationship, the DoD Components are encouraged to, insofar as practicable, establish and maintain relationships with NHOs separate from consultations related to specific actions” (DoDI 4710.03, Enclosure 3, 1.(c)). The U.S. Army Hawai‘i Covenant with Native Hawaiians specifically states that the U.S. Army Hawai‘i is “committed to: Providing proactive dialog with Native Hawaiians to ensure the meaningful exchange of information and to enable sound, informed decisions by the Army that respects the legacy of the Native people of Hawai‘i while meeting the mission and goals of the Army.”

Laws, Implementing Regulations, and other guidance

- Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C §3002 (3)(c), 43 CFR §10.3
- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- Archaeological Resources Protection Act (ARPA) (16 U.S.C. §470aa-470mm)
- American Indian Religious Freedom Act (AIRFA) (42 U.S.C. §1996)
- DoD Instruction 4710.03: Consultation with Native Hawaiian Organizations (NHOs)
- U.S. Army Hawai‘i Covenant with Native Hawaiians (<https://www.garrison.Hawai‘i.army.mil/hawaiiancovenant/NativeHawaiianCovenant.pdf>)

Important Concepts

Consultations are effective when established as on-going relationships (DoD Instruction 4710.03).

Native Hawaiians and NHOs have not been granted recognition as governments by the United States. However, Congress has formally provided the right of Native Hawaiians to be consulted on decisions affecting cultural resources in a number of Federal statutes, including the Native American Graves Protection and Repatriation Act (NAGPRA) and the National Historic Preservation Act (NHPA). Consultation with Native Hawaiians and NHOs is a mandate under these two statutes.

Confidentiality

The NHPA and the ARPA contain provisions to protect culturally sensitive information that may be shared during consultations from general public disclosure. Federal requirements under the Freedom of Information Act (FOIA) (5 USC §552) may require the Army to make available consultation documents upon request. USAG-HI will protect culturally sensitive information from public disclosure as requested by the disclosing NHO, to the extent consistent with other legal obligations.

Timing and Process

It is important to develop a consultation schedule that affords NHOs sufficient opportunity to review information and documentation provided by USAG-HI. Decision-making authority may not be vested in one individual, and time may be needed in order to reach consensus on a particular issue. Consideration

should extend to distance and cost of travel as well as site visits. The schedule for consultation should be developed mutually by the Army and Native Hawaiians, taking into consideration a variety of issues including: (1) the complexity of the consultation issues, (2) Army and NHOs schedule and fiscal constraints, (3) Army and NHOs standard operating procedures and protocols, and (4) statutory requirements. The consultation schedule must also fit within the overall project timetable, including fiscal, mission, and other legal constraints.

5.8. SOP 8: Archaeological Collections Curation and Management

Introduction

In accordance with 36 CFR §79, federal agencies are mandated to preserve collections of historic and prehistoric material and associated records recovered under the authority of the Antiquities Act (54 USC §320301), the Archaeological and Historic Preservation Act (54 USC §321501), Section 110 of NHPA (54 USC §300101), or ARPA (16 USC §470aa).

Laws, Implementing Regulations, Guidance, and policy

- Curation of Federally Owned and Administered Archeological Collections (36 CFR §79)
- Federal Property and Administrative Services Act (40 U.S.C. §484), and its implementing regulations (41 CFR §101)
- Guidelines for the Field collection of Archaeological Materials and Standard Operating Procedures for Curation of Department of Defense Archaeological Collections (Griset and Kodack 1999)
- U.S. Army Garrison in Hawai'i Archaeological Collections Care Management Plan (ACOMP)

Important Concepts

The U.S. Army Garrison, Hawai'i has a curation facility at Schofield Barracks and USAG-Pōhakuoa maintains a small curation facility at PTA. These facilities provide long-term care and management of the items accessioned into the collections and of the associated records. See Appendix B for *Cultural Resources Materials Remains and Associated Records Curation Standards*.

Collections Curation and Management Procedures

Artifact curation facilities operate in compliance with all applicable Federal regulations, as well as all corresponding Army regulations and guidelines.

1. In accordance with 36 CFR §79, collections and associated records are available for scientific, educational, and religious uses, subject to such terms and conditions as are necessary to protect and preserve the condition, research potential, religious or sacred importance, and uniqueness of the collection. To gain access to the collections, all potential users must submit a request to the Cultural Resources Section. Any resulting exhibits and/or publications shall acknowledge USAG-HI, and the U.S. Army as the owner and administrator of the collections. Any resulting publications including exhibition supplementary materials shall be coordinated through the Public Affairs Office and copies of any publications, reports, or other materials provided to the USAG-HI CRM. All internal displays and outgoing loans of materials require execution of written loan agreements, which include written authorization of the CRM.
2. Maintenance of the storage facility, the collection, and the associated information is part of the Cultural Resources Section responsibility. Each artifact is provided with sufficient space, storage furnishings, temperature, humidity, and light levels to maximize object stability over time. Regularly scheduled monitoring of environmental controls, cleaning, and spot inventories enable the CRM to comply with 36 CFR §79.

5.9. SOP 9: Maintenance Procedures for Historic Buildings and Structures

Introduction

Many different types and levels of undertakings can affect architectural character and appearance of historic buildings, structures and objects (for brevity referred to in this SOP as only “historic building”), from replacement of deteriorated architectural features to the rehabilitation and adaptive reuse of an entire building. Changes that are not done in a sympathetic manner can negatively impact, not only the historic building itself, but surrounding historic buildings or districts as well. This SOP provides uniform guidance for planning facilities maintenance, development, and alterations projects in or adjacent to eligible historic buildings and/or archaeological sites. These procedures may be initiated by DPW or through work requests and contracts. If NHPA Section 106 compliance is required, the CRM is involved to review the project(s) in accordance with NHPA Section 106 (see ICRMP SOP 1) and provide input on project alternatives and/or mitigation options when necessary.

Laws, Implementing Regulations, and guidance

- The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (see 36 CFR §68)
- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- AR 200-1: Environmental Protection and Enhancement

Important concepts

To aid Federal agencies, the National Park Service developed The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995). The Secretary of the Interior’s Standards are general in nature, but address issues as diverse as materials, architectural features, interiors, setting (district/neighborhood), and special considerations, such as additions, energy conservation, handicapped accessibility, and fire/life safety.

The Secretary of the Interior’s Standards (36 CFR §68) are comprised of four distinct but interrelated approaches to the treatment of historic properties—Preservation, Rehabilitation, Restoration, and Reconstruction. **Preservation** (Section 1.4.1) focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved through time. It requires retention of the greatest amount of historic materials, form, and features. **Rehabilitation** (Section 1.4.2) acknowledges the need to alter or add to a historic property to meet continuing or changing uses and mission needs while retaining the property's historic character. **Restoration** (Section 1.4.3) is undertaken to depict a property at a particular period of time in its history. It does this by preserving materials from the period of significance and removing materials from other periods. Finally, **Reconstruction** (Section 1.4.4), recreates non-surviving portions of a property with new materials, primarily for interpretive purposes.

General Guidelines

The maintenance and repair of historic buildings requires an understanding and appreciation of the historic context of the property, knowledge of its original materials and finishes, and a program of regular maintenance that includes proper repair and preventative maintenance procedures. The improper

application of new materials in a historic building or the improper maintenance of existing historic materials can detract from the historic appearance and diminish historic integrity.

When maintaining or repairing historic buildings, consider these general guidelines:

a) Conservation of existing original and historic materials.

The integrity of a historic building depends on the survival of its original form, structural system, and historic materials. Removal or alteration of any historic elements should be avoided, and the existing materials should be preserved through proper care and maintenance. This includes protection from natural deterioration through periodic evaluation and preventive maintenance.

b) Replacement in kind.

Missing historic elements shall be replaced in kind, and damaged or altered historic elements shall be repaired in kind. This includes doors, windows, screens, canec panels, and railings. The original state of missing, damaged, or altered elements and materials can usually be determined from original drawings and historical photographs, and logical conclusions drawn from the existence of similar structures from the same era.

c) Removal of non-historic additions or elements.

Non-historic additions or elements reduce the historic integrity of the building/structure. These include shed and roof additions; the installation of jalousie windows in place of screens, lattice, casement, or double-hung windows; and the introduction of non-compatible elements. While it is recognized that modern equipment such as kitchen appliances, bathroom fixtures, lighting, etc. are necessary for human comfort and productivity, these elements must be selected so that their style, color, and shape do not detract from the historical nature of the building. Any existing equipment that is not compatible with a historic building should be removed and replaced with historically compatible equipment. When non-conforming doors, windows, railings, and other exterior architectural features reach the end of their useful life, they should be replaced with historically accurate or compatible elements.

Routine Maintenance Activities Not Requiring Further Section 106 Consultation

The following is routine maintenance activities affecting USAG-HI's historic family housing. These activities do not pose a potential threat to historic resources and are therefore exempt from further Section 106 review. The following list is extrapolated from the *Programmatic Agreement Among the United States Army, The Hawai'i State Historic Preservation Officer, and the Advisory Council on Historic Preservation for the Privatization of Family Housing at US Army Garrison, Hawai'i* (see ICRMP Section 6.4).

1. Alteration, repair, and/or modification of "Not Eligible" or non-contributing buildings within Historic District boundaries.
2. Alteration, repair, and/or modification of the interior of buildings that are considered "Not Eligible" for individual listing on the NRHP but are contributing to a historic district; the alterations or modifications must not affect the exterior of buildings.
3. Painting exterior surfaces, when the new paint matches the existing or original color.
4. Replacement or installation of caulking and weather-stripping around windows, doors, walls, and roofs.
5. Removal of non-original intrusive surface-applied elements such as exterior wall mounted conduit, pipes, wiring, junction boxes, etc.
6. Replacement, removal, or upgrading of electrical wiring.
7. Repaving existing paved roads, parking lots, or sidewalks.

8. Landscaping and grounds maintenance that does not result in subsurface disturbance. Such activities include lawn mowing, tree and shrubbery trimming, and vegetation clearance that does not involve root grubbing. Ongoing maintenance of existing landscaping, including such modifications as removing diseased or safety-threatening vegetation.
9. Tree or shrub planting or removal in areas that have previously been disturbed by these activities.
10. Excavations for repair or replacement of building footings or foundation work within two (2) feet of existing footings and foundations.
11. Installation of utilities, such as sewer, water, storm, electrical, and gas, where installation is restricted to areas previously disturbed by installation of these utilities.

6. IMPLEMENTING THE ICRMP

DoDI 4715.16 requires that the ICRMP “be thoroughly integrated with other installation plans, including but not limited to the installation master plan, the facilities maintenance plan, training and range area management plans, natural resources management plans, mobilization and deployment plans, and information management systems.”

The CRM plays a primary role in implementation of this ICRMP. In fulfillment of this role, the CRM coordinates compliance with historic preservation laws and Army regulations on behalf of the Garrison Commander. The CRM also coordinates with users, interested parties, and the public to ensure compliance with NHPA, NAGPRA, and ARPA, among other laws. In addition, the CRM coordinates consultation with interested parties to address management concerns that affect the ability of USAG-HI to comply with historic preservation laws and regulations.

Implementing the ICRMP promotes:

- Informed decisions regarding cultural resources by USAG-HI personnel in many programs.
- More effective and efficient management of cultural resources;
- Compliance with public laws, regulations, and other binding commitments;
- Support of the military mission; and
- Consistency in application of cultural resources management principles.

6.1. Cultural Resources Implementation Objectives

The Cultural Resources Implementation objectives include all of the tasks required to plan, organize, and implement the Cultural Resources Management program at USAG-HI. Included in this list are identified data gaps. Implementation objectives for the Cultural Resources Section include the following:

1. Improve coordination in compliance review of undertakings with emphasis on timely and effective coordination between proponents and the CRM. Encourage use of DPW-wide GIS for more effective and reliable exchange of planning information among programs.
2. Complete reasonable and good faith archaeological and cultural resources surveys of cantonment and training areas as needed to support training and other projects and missions.
3. Compile and validate archaeological site inventory.
 - As of October 2015, there are 1,040 sites in the Archaeological Site Inventory, 648 of which have an NRHP Status of N/A or TBD. Inventory updates are ongoing as new surveys occur and old reports reviewed for site data accuracy.
 - Within the existing Archaeological Site Inventory, terms used to describe NRHP status are inconsistently applied. Inconsistent application of NRHP Criteria also appears throughout the Inventory. Established DoD Real Property Historic Status Codes need to be applied to the Archaeological Site Inventory (e.g. NRHP Status “TBD” should be replaced with Historic Status Code “NEV”).
4. Compile and validate cultural resources spatial data in SDSFIE-compliant GIS application.
 - Archaeological site data validation is ongoing to correct site duplication, isolated finds, sites located outside of installation boundaries, and georeferencing errors or omissions.
 - According to the Archaeological Site Inventory, there are currently more than 300 sites requiring georeference and/or field verification.
 - Attributes in the existing GIS dataset for O’ahu buildings and structures are limited and generally lack consistent application of the unique building IDs, making it difficult to link RPLANS data to GIS attribute tables.

5. Compile and validate RPLANS data.
 - RPLANS data is available for 6,792 buildings and structures (historic and nonhistoric) on O‘ahu, but the GIS dataset for existing buildings and structures identifies 11,184 assets (historic and nonhistoric). Efforts are ongoing to compile and validate RPLANS and GIS datasets.
6. Complete evaluations of buildings and structures 50 years of age or older and update the NRHP status code in GFEBS and RPLANS.
 - As of December 2016, there were a total of 2,056 buildings and structures over 50 years of age in the RPLANS database. Of these, 1,271 buildings and structures still required evaluation to determine National Register eligibility for update in GFEBS and RPLANS.
7. Prepare Historic Structure Reports and/or Treatment Plans for the care and maintenance of NRHP eligible historic buildings, structures, and districts.
8. Develop Programmatic Agreements with SHPD for general operations, maintenance, and development.
9. Develop Programmatic Agreements with SHPD for routine training activities in training areas.
10. Provide information about the USAG-HI Cultural Resources Section to the PAO for inclusion on publically available websites. Website(s) should include information about cultural resources, the program, and policies, as well as current updates on major projects under review and information supporting consultations.
11. Maintain an active public outreach program, especially serving military personnel, through brochures, trifold, posters, access to historic properties, articles in Hawaii Army Weekly and Environmental Bulletin, and outreach activities involving other state agencies and private organizations, schools, and the Native Hawaiian community.
12. Pro-actively consult with Native Hawaiian Organizations and other interested parties in accordance with Department of Defense and Department of the Army guidance.
13. Maintain curation of archaeological collections and records, and orderly control of the technical libraries and associated records needed to support the CRM program (see Appendix B for curation standards).
14. Create and maintain a records management system for historic properties, Section 106 files, and contractual documents identified on Garrison controlled lands.
15. Fully integrate ICRMP actions into INRMP, Master Planning and USARHAW TSS range plans.

6.2. Reporting

USAG-HI is responsible for submitting reports for funding requirements, funding work plans, and environmental quality status, among others.

Recent emphases in real property accounting standards within DoD have resulted in an increased emphasis on documenting SHPD concurrence with respect to eligibility evaluations to determine whether a particular property is or is not eligible for the NRHP. Eligibility establishes particular standards of care and responsibility for the Garrison, the applicability of which need to be reflected in the real property inventory records of the Garrison. Should there be a determination that a property is NOT eligible for the NRHP, the non-applicability of those standards to the specific property also needs to be supported with written documentation. An agency determination without written concurrence from the SHPD is not sufficient for the accounting standard, especially for buildings, structures, and objects managed by the Garrison. Requests for SHPD concurrence as to eligibility will be a significant part of the correspondence and interaction between the Garrison and the SHPD, whether or not the subject properties are at risk of being affected by a particular project or undertaking.

6.3. Cooperative Agreements

AR 200-1 directs that, where applicable, an installation should enter into Cooperative Agreements (CAs) with state and federal conservation agencies for the preservation and stewardship of cultural resources in accordance with the following authorities:

- (1) Economy Act, 31 U.S.C. 1535, authorizes the Army to issue orders to other federal agencies to provide goods or services, so long as the order is in the best interests of the government, is cheaper or more convenient than procurement under contract, and does not conflict with another agency's authority.
- (2) Title 10 U.S.C. Section 2684 authorizes the Army to enter into CAs with states, local governments, or other entities for the preservation, maintenance, and improvement of cultural resources on military installations and for the conduct of research regarding cultural resources on installations. (National Defense Authorization Act for Fiscal Year 1997, Pub. L. No. 104-201, 110 Stat. 2422, Section 2862 (1996), adding section 2684 to Chapter 159 of Title 10 of the United States Code.).
- (3) Agreements (e.g., MOUs and CAs) have been established between the DoD, other federal agencies and non-profit organizations, which provide arrangements for DoD components to enter into implementing agreements with such agencies and organizations for the attainment of mutual conservation objectives. Garrison Commanders, utilizing relevant and appropriate statutory authority, as set forth above, may develop and sign implementing Interagency Agreements or CAs with said entities. All Interagency Agreements and CAs entered into in accordance with the provisions of this section must receive technical and legal review prior to the Garrison Commander's signature.

6.4. NHPA Section 106 Agreements

Programmatic Agreements (PAs), Memoranda of Agreement (MOAs), and Advisory Council on Historic Preservation Program Comments executed pursuant to Section 106 of the NHPA and its implementing regulations at 36 CFR §800 are legally binding agreements that set forth how the Army will satisfy its responsibilities in the event of an Army undertaking that will affect specific historic properties and property types. The following Agreements and Program Comments are applicable for USAG-HI:

Agreement	Scope	Initial Date	Expiration Date	Notes
Nationwide Agreements applicable to USAG-HI				
Programmatic Memorandum of Agreement for Demolition of WWII Temporary Buildings	Applies to demolition of Temporary buildings constructed during WWII	1986 1991 amendment	none	
Program Comment for Capehart and Wherry Era Army Family Housing (2002)		2002	none	
Program Comment for Cold War Era Unaccompanied Personnel Housing		2007	none	
Program Comment for Cold War Era Ammunition Storage Facilities		2007	none	
Program Comment for Rehabilitation Treatment Measures		2008	11/01/2018 unless extended	
Programmatic Agreements applicable to USAG-HI				
Programmatic Agreement for Section 106 Responsibilities for the Aboriginal Hawaiian Use of Ukanipo Heiau Complex at Mākua Military Reservation	Recognizes the Ukanipo Heiau Advisory Council as responsible for some maintenance and screening of cultural/public access to the site	2000	none	
Programmatic Agreement for Privatization of Family Housing at USAG-HI	Terms included into ground lease to Lend-Lease to protect historic buildings transferred as part of housing privatization	2004	2054 50 years, option to extend for 25 more	Island Palm Communities, LLC is housing "partner"

Programmatic Agreement for Army Transformation of the 2 nd Brigade, 25 th Infantry Division (Light) to a Stryker Brigade Combat Team (SBCT)	Covers 28 individual projects, PTA and O'ahu.	2004, extended in 2010	original expiration date: 2010 extension 12/31/2015 12/31/2017	
Amendment to SBCT PA	Extends date	2010	12/31/2015	
2 nd Amendment to SBCT PA	Extends date	2015	12/31/2017	
Programmatic Agreement Regarding Transfer and Rehabilitation of the Lodging Facilities at Tripler Army Medical Center	Requires Rest Easy, LLC to maintain and rehabilitate historic buildings as a condition of lease. Some leases short-term, some for 50 years.	2009	2059	Some parts expire earlier, beginning at 5yrs (2014) For Building 228, a 50yr lease
NAGPRA Agreements				
POA for treatment of human remains and Native Hawaiian Cultural Items During Ground Disturbing Work at PARC		August 2010	None	
Native American Graves Protection and Repatriation Act (NAGPRA) Plan of Action for the Reburial of Four Sets of Native Hawaiian Human Remains Inadvertently Found From May 14, 2010 to January 6, 2012 at the Battle Area Complex (TMK7-70-01) on the Schofield Barracks Military Reservation	Between 7 recognized claimants & USAG-HI. Four reburial areas for fragmented inadvertent discoveries, limited landscaping of area	Final signature: 7/25/2012	None	
Plan of Action ... Kalia DeRussy Wastewater System Improvements Project, Waikiki		Signed: 2/24/2014		
KTA burial Cave	Site 5355	6/10/2015		

Regular NHPA MOA documents				
demolish SB 494A and rebuild		3/07/2013	3/07/2018	2 party MOA
Memorandum of Agreement Between the Department of the Army and the Hawai'i State Historic Preservation Officer Submitted to the Advisory Council on Historic Preservation Pursuant to 36 CFR § 800.5(e)(4) Regarding the Demolition of Family Housing Area 300, Fort Shafter, O'ahu Island, Hawai'i		1999		
Construction of an Aviation Brigade at WAAF		2004		
Demolition of 4 buildings at WAAF		06/25/2014	2019	2 party MOA, no ACHP participation
Vegetation Management for access to archaeological sites at Makua Military Reservation		9/11/2015	9/11/2025	3 party, ACHP signed
Other Agreements				
Marine use of MV22 and H-1 in Hawai'i		July 2012	2022 unless completed earlier	Army is Invited Signatory. Marines to use some Army Landing Zones.
Memorandum of Agreement VA Pacific Islands Health Care System and United States Army Garrison, Hawai'i	USAG-HI to take lead for Section 106 on VA projects	4/20/2012		An agreement between VA and USAG-HI about coordination.
KMC special use agreement	National Park Service terms for Army operation of KMC within Hawaii Volcanoes National Park bounds.	2002	2021	

6.5. Organizational Enhancement, Roles and Responsibilities

Installation Integration

The primary users of the ICRMP at the activity level are the Directorate of Public Works (DPW), the Directorate of Plans, Training, Mobilization, and Security (DPTMS), and the Directorate of Family and Morale, Welfare, and Recreation (DFMWR). However, there are numerous project proponents in the Major Support Commands (MSCs) that must be made aware of the compliance requirements associated with their activities and their potential impacts on cultural resources. These include Brigade Commanders, Battalion Commanders, and the Provost Marshal (PM). The Command level, U.S. Army Garrison, Hawai'i (USAG-HI), also has a vested interest in the ICRMP; the Garrison Commander (GC) is the responsible agency official for the ICRMP. Special staff of the Command level, such as the Public Affairs Office (PAO), and the Office of the Staff Judge Advocate (OSJA) often play a lead role as liaison with interested parties from the surrounding community and outside agencies.

Many offices that require cultural resources integration fall under the DPW. The DPW is responsible for managing roads, buildings, and natural and cultural resources at USAG-HI. DPW maintains and manages land to conserve biodiversity and ensure that the installation complies with federal and state environmental laws and regulations. DPW is responsible for implementing ICRMPs and Integrated Natural Resources Management Plans (INRMPs).

The Cultural Resources Section falls under the purview of DPW, which is responsible for managing the environmental program on a day-to-day basis. This responsibility requires that all major activities (at all levels and scales, such as training exercises, construction and demolition, and other actions) that could potentially impact the environment be assessed prior to commencement of the action. The objectives for program managers to determine and rate the impacts within their programs, both positive and negative, are provided by various annual monitoring and reporting mechanisms. The primary concern of the DPW is to ensure that the Cultural Resources Section supports the DPW and Garrison mission, vision, and goals at each sub-installation.

Command Support

AR 200-1 defines the role of the Garrison Commander (GC), the responsibilities of the Cultural Resources Management program, and the requirement from DoDI 4715.16 to complete an ICRMP. Together, these elements create a framework for managing cultural resources at the installation level and support the Army in addressing its need for a comprehensive cultural resources management program. Therefore, the effective management of cultural resources, as exemplified by the development and Garrison-wide acceptance of this ICRMP, follows from federal laws, Army regulations, and from Federal Standards and Guidelines for federal historic preservation programs.

Cultural Resources Management Organization

The CRM is delegated cultural resources management responsibility by the USAG-HI Commander to provide day-to-day management of cultural resources, help ensure that all installation activities are in compliance with applicable cultural resource requirements, serve as a liaison between all persons involved with the implementation of the ICRMP, write the ICRMP or develop its Statement of Work, and implement the ICRMP's Standard Operating Procedures in support of the overarching DPW EMS Program.

Under legal requirements of Section 106 of NHPA, NAGPRA, and ARPA, among others, the CRM reviews planned projects for potential adverse effects on cultural resources. In so doing, the CRM routinely furnishes information and professional advice to DPW staff, tenants, and users so that planned activities may avoid adverse effects to cultural resources.

Staffing

The USAG-HI CRM fulfills a range of responsibilities assigned in AR-200-1, and the ICRMP supports the execution of these responsibilities. The CRM is the Army civilian employee assigned by USAG-HI Garrison Commander to provide oversight and direction to the Cultural Resources Section staffed by professionally qualified personnel, which conduct most of the project review, public education, and inventory information management. Full implementation of this ICRMP requires full-time cultural resources positions with technical assistance provided by partners, cooperators, and contractors.

In order to meet USAG-HI's regulatory responsibilities, the CRM ensures consideration of cultural resources during the planning and implementation of the installation's programs, undertakings, and actions that have the potential to affect historic properties (NHPA Section 106). USAG-HI's Cultural Resources Section also supports the installation's responsibilities pursuant to NHPA, ARPA, NAGPRA, and a suite of other cultural resources statutes, regulations, and guidelines. The CRM coordinates with stakeholders across the installation to assist the GC in meeting these regulatory responsibilities.

Qualifications

Pursuant to Section 112 of NHPA, agency personnel or contractors responsible for historic properties analysis must meet professional qualification standards established by the Office of Personnel Management in consultation with the Secretary of the Interior. These are *The Secretary of the Interior's Professional Qualification Standards*, defined in 36 CFR §61. Historic properties management activities discussed in this ICRMP must be conducted and/or supervised by cultural resources management professionals with the minimum qualifications that meet the standards for the appropriate discipline.

Training

Interdisciplinary training is essential for DoD Cultural Resources Managers and staff to address practical job disciplines, statutory compliance requirements, applicable regulations, and current professional qualification standards. It is important for the Cultural Resources Management staff to be knowledgeable in the issues affecting cultural resources and how these issues may affect USAG-HI's mission.

Cultural resources management training is supported for both Army and Cooperative Agreement staff to include Naval Civil Engineer Corps Officers School (CECOS) courses on various aspects of cultural resources management, IMCOM funded cultural resources sessions, and occasional other training opportunities.

Current training requirements may include the following:

- 24 hours annually for CRM staff to maintain and increase skills and capabilities.
- The Department of Army police force within the Garrison shall include officers trained in the requirements and techniques needed for successful response and investigation of all applicable federal and State laws and regulations as part of the College-Level Exam Program (CLEP) for all law enforcement personnel assigned to support environmental programs (see DoDI 5525.17). These include, but are not limited to, training with respect to enforcement of ARPA violations.
- The Criminal Investigation Division (CID) shall include investigators trained in the requirements and techniques needed for successful documentation and prosecution of violations of all

applicable federal and State laws and regulations. These include, but are not limited to, training with respect to enforcement of ARPA violations.

- The Office of the Staff Judge Advocate (OSJA) shall ensure that attorneys providing opinions and advice on cultural resources issues have training and experience with respect to cultural resources legal topics. 40 hours of annual training is specified for OSJA attorneys in CR related requirements as part of CLEP for the attorneys assigned to support environmental programs.

Public Involvement, Outreach, and Educational Materials

Outreach is another foundational component of cultural resources implementation. The Cultural Resources Section integrates outreach efforts through the conservation webpage, conservation newsletter, and other outreach events. Likewise, Federal and Army regulations require that interested members of the public have an opportunity to be involved in consultations and in the decision-making processes concerning historic preservation and environmental management efforts.

The purpose of NHPA envisions public benefits from the continuing presence of historic properties in communities. In many instances, that intended benefit would entail an opportunity to see and appreciate historic properties in their settings. This opportunity is not always available on military installations due to security considerations, safety considerations within training ranges, or schedules for required training activities. Thus, opportunities for the public to learn the histories associated with historic properties would provide some public benefit, as intended by the NHPA. One important public constituency for information regarding historic and cultural places within the Garrison is the military and military dependents currently assigned to USAG-HI. Many of USAG-HI's cultural resources may serve to instill knowledge and pride in the military history and traditions connected to properties in Hawai'i for those who serve here. Cultural resources can help foster a greater understanding and appreciation of the unique history and traditions of the larger community.

USAG-HI shares information with the public regarding the Cultural Resources Section and the cultural resources under its stewardship as required. USAG-HI engages the public as a partner, as well as the intended beneficiary of the program. Public input on the general character of the program and public views regarding the known resources helps inform the Cultural Resources Section in its management goals and objectives. The public may offer valuable insights as to the ways in which various cultural resources convey or embody value. The public may also offer ideas regarding appropriate means through which USAG-HI may balance care for the resources with the demands of mission support.

Public Involvement Directives

A number of legal authorities devote specific direction to the inclusion of interested members of the public in the planning of projects, actions, or undertakings that might affect cultural resources. According to DoDI 4715.16, it is DoD policy to consult in good faith with internal and external stakeholders and promote partnerships to manage and maintain cultural resources, and provide for public access to cultural resources, as appropriate. Both NEPA and NHPA specifically direct federal agencies to begin assessing cultural resources issues as early as possible in the process of planning actions or undertakings. Project-specific consultations arise as part of NHPA Section 106, in consideration of applications for an ARPA permit, from projects or actions that may affect Cultural Items as defined in NAGPRA, from inadvertent discoveries of archaeological resources or cultural items, and from actions that could affect access or use of sacred places. ARPA likewise requires a program for public awareness of the significance of archaeological resources and the need to protect them (16 USC 470 §10(c)).

Participation in Defining Program Alternatives and Agreements

Many of the cultural resources laws and regulations allow the basic compliance procedures to be customized or streamlined through agreements of broader application than the project-by-project generic procedures. More general and customized procedures can be established to provide orderly responses to situations known to recur, or to properly coordinate a particularly large or complex undertaking. The NHPA implementing regulations offer a number of “program alternatives” (36 CFR 800.14) to federal agencies. NAGPRA encourages adoption of Comprehensive Agreements that can govern responses to recurring situations. In order to establish these agreements for tailored procedures, there must be open-ended consultations with the parties signing the agreements, and with other interested parties and individuals.

Ongoing Relationships

DoD policy (DoDI 4710.03) establishes that consultation with Native Hawaiian Organizations should take place in the context of an on-going relationship, and not be based on project-by-project consultations only. The directives from DoD view maintaining an active, ongoing relationship with NHOs as crucial to producing outcomes that better support military mission needs while also meeting the stewardship responsibilities in cultural resources requirements.

USAG-HI should maintain consultative relationships continuously rather than as a project specific duty. This is a best management practice and consistent with the DoD policy and guidance. There should be periodic effort to maintain communications and exchange of information with those whose interests are in traditional Hawaiian sites, historic architecture, military history in Hawai'i, WWII and Cold War properties, or any other interests in the cultural resources managed by the Garrison.

6.6. Financial Management and Funding

Another significant component of USAG-HI Cultural Resource Program management is financial management. Financial management consists of funding, budgeting, and contracting. These three components all are extremely important to USAG-HI's ability to implement this plan. This section of the plan assists in the development of funding requests and projections for many aspects of cultural resources program implementation

IMCOM policy for use of environmental funds for cultural resources activities is issued in annual funding guidance. The funding guidance specifies projects and activities that are not eligible for environmental funding. Projects and activities that are not eligible for environmental funding include repair, maintenance, and rehabilitation of historic properties (including National Register-eligible and listed buildings, structures, sites, objects, landscapes, districts, and cemeteries). Even in cases where repair, maintenance, and rehabilitation activities are stipulated and required in NHPA Section 106 PAs or MOAs, such activities remain not eligible for environmental funds and must be supported through other fiscal sources.

Tenant organizations and other proponents are responsible for securing funding for their environmental requirements through their major commands unless other agreements have been made in their MOU/ISSA with the host installation (AR 200-1, 15-1). Tenants have a joint responsibility (along with the host installation), for ensuring that environmental reporting requirements are met.

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8. APPENDICES

8.1. APPENDIX A: List of Acronyms

25 th ID	25th Infantry Division	CEPOD	U.S. Army Corps of Engineers, Pacific Ocean Division
AAF	Army Airfield		
ACCOMP	Archaeological Collections Care Management Plan	CEQ	Council on Environmental Quality
ACHP	Advisory Council on Historic Preservation	CEX	Technical Center of Expertise (U.S. Army Corps of Engineers)
ACSIM	Assistant Chief of Staff for Installation Management	CERL	Construction Engineering Research Laboratory
A.D.	anno Domini	CFR	Code of Federal Regulation
ADP	Area Development Plan	CFSC	Community and Family Support Center
ADEP	Area Development Execution Plan	CID	Criminal Investigation Division
AE	Adverse Effect	CINCPOA	Commander-in-Chief, Pacific Ocean Areas
AFB	Air Force Base		
AHPA	Archaeological and Historic Preservation Act of 1974	CLEP	College-Level Exam Program
AIRFA	American Indian Religious Freedom Act	CLR	Cultural Landscape Report
AMC	Army Medical Center	CMTC	Citizens Military Training Camp
AMR	Āliamanu Military Reservation	COE	Corps of Engineers
AOR	Area of Responsibility	CONARC	Continental Army Command
APE	Area of Potential Effect	CRM	Cultural Resources Manager/Management
AR	Army Regulation	CS	Combat Support
ARPA	Archaeological Resources Protection Act of 1979	CSA	Chief of Staff, Army
ARTEP	Army Training and Evaluation Program	CSS	Combat Service Support
asl	above sea level	CX	Categorical Exclusion
ATV	All-Terrain Vehicle	CZMA	Coastal Zone Management Act of 1972
AVN BDE	Aviation Brigade	DA	Department of the Army
AWCF	Army Working Capital Fund	DCA	Directorate of Community Activities
AWS	Aircraft Warning System	DCO	Deputy Commanding Officer
BAAF	Bradshaw Army Airfield	DEH	Directorate of Engineering and Housing
BAX	Battle Area Complex	DEIS	Draft, Environmental Impact Statement
BDE	Brigade	DHEW	Department of Health, Education & Welfare
BPP	Building Preservation Plan	DHS	Directorate of Health Services
CA	Comprehensive Agreement	DISCOM	Division Support Command
CACTF	Combined Arms Collective Training Facility	DIVARTY	Division Artillery Group
CALFEX	Company-Level Combined Arms Live Fire Exercise	DLNR	Department of Land and Natural Resources, State of Hawai'i
CCC	Civilian Conservation Corps	DMR	Dillingham Military Reservation
CDR	Commander	DoD	Department of Defense
CECOS	Civil Engineer Corps Officers School	DoDI	Department of Defense Instruction
		DOE	Determination of Eligibility

DOI	Department of the Interior	HAR	Hawai'i Administrative Rules
DPTMS	Directorate of Plans, Training, Mobilization, and Security	HAVO	Hawai'i Volcanos National Park
DFMWR	Directorate of Family and Morale, Welfare, and Recreation	HBPP	Historic Building Preservation Plan
DPW	Directorate of Public Works	HDOT	Hawai'i Department of Transportation
DRM	Directorate of Resource Management	HIARNG	Hawai'i Army National Guard
DSCENGR	Deputy Chief of Staff for Engineering (USARPAC)	HIBC	Hawai'i Island Burial Council
DUSD(ES)	Deputy Under-Secretary for Defense (Environmental Security)	HLMP	Historic Landscape Management Plan
EA	Environmental Assessment	HMA	Hawai'i Motor Sports Association
EDRE	Emergency Deployment Readiness Exercise	HMR	Helemano Military Reservation
EIS	Environmental Impact Statement	HPP	Historic Preservation Plan
EMS	Environmental Management System	HQDA	Headquarters, Department of the Army
ENV	Environmental Division	HQIS	Headquarters Installation Information System
EO	Executive Order	HRS	Hawai'i Revised Statute
EPAAS	Environmental Performance Assessment and Assistance System	HAS	Historic Sites Act of 1935
ERA	Emergency Relief Act	HSR	Historic Structure Report in accordance with
EPR	Environmental Program Requirements	IAW	
EQR	Environmental Quality Report	ICAR	Installation Corrective Action Plan
ERDC	Engineer Research and Development Center	ICRMP	Integrated Cultural Resources Management Plan
FDR	Fort DeRussy Military Reservation	IMCOM	Installation Management Command
FEWR	Facilities Engineering Work Request (DA Form 4283)	IMCOM-HQ	Installation Management Command-Headquarters
FHPO	Federal Historic Preservation Officer	IMCOM-PAC	Installation Management Command-Pacific
FOIA	Freedom of Information Act	INRMP	Integrated Natural Resources Management Plan
FONSI	Finding of No Significant Impact	IPB	Installation Planning Board
FORSCOM	Forces Command	IPBC	Infantry Platoon Battle Course
FOUO	For Official Use Only	IRB	Installation Review Board
FR	Federal Register	ISSA	Inter-Service Support Agreement
FRA	Federal Records Act	ITAM	Integrated Training Area Management
FSK	Field Station Kunia	JOTC	Jungle Operations Training Center
FSMR	Fort Shafter Military Reservation	KAS	Kīpapa Ammunition Storage Site
GC	Garrison Commander	KLOA	Kawailoa Training Area
GFEBs	General Fund Enterprise Business Systems	KMA	Ke'āmuku Maneuver Area
GIS	Geographic Information Systems	KMC	Kilauea Military Camp
HABS/HAER	Historic American Buildings Survey/Historic American Engineering Record	KMR	Kawaihae Military Reservation
		KTA	Kahuku Training Area
		LCTA	Land Condition Trends Analysis
		LCVP	Landing Craft, Vehicles and Persons
		LDP	Landscape Development Plan
		LLC	Limited Liability Corporation

LRAM	Land Rehabilitation and Maintenance	OCONUS	Outside the Continental United States
LZ	Landing Zone	OHA	Office of Hawaiian Affairs
Lt.	Lieutenant	OIBC	O'ahu Island Burial Council
MAB	Mokulē'ia Army Beach	OMA	Operations and Maintenance, Army
MACOM	Major (Army) Command/Major Command	OPLAN	Operational/Operations Plan
MAR	Maintenance and Repair Program	OPORD	Operation Order
MCA	Military Construction, Army	OR&L Co.	O'ahu Railway and Land Company
MCX	Mandatory Center of Expertise (U.S. Army Corps of Engineers)	OSJA	Office of the Staff Judge Advocate
MCRD	Marine Corps Recruit Depot	PA	Programmatic Agreement
MEDCOM	Army Medical Command	PAO	Public Affairs Office/Officer
METLs	Mission Essential Tasks	PARC	Piliā'au Army Recreation Center
MKS	Mauna Kapu Communication Station Site	PBCUA	Public Buildings Cooperative Use Act
MMR	Mākua Military Reservation	PBSB	PTA-Based Support Battalion
MOA	Memorandum of Agreement	PM	Provost Marshall
MOU	Memorandum of Understanding	PMOA	Programmatic Memorandum of Agreement
MOUT	Military Operations in Urban Terrain	POA	Plan of Action
MR	Military Reservation	POD	Pacific Ocean Division, USACE
MSCs	Major Support Commands	POM	Program Objective Memorandum
MWR	Morale, Welfare, and Recreation	PTA	Pōhakuloa Training Area
N/A	Not Applicable	PTSD	Post Traumatic Stress Disorder
NAE	No Adverse Effect	PWA	Public Works Administration
NAGPRA	Native American Graves Protection and Repatriation Act of 1990	PZ	Pickup Zone
NEPA	National Environmental Policy Act of 1969	RCS	Report to Congress
NEV	Not Evaluated	RCUH	Research Corporation of the University of Hawai'i
NHL	National Historic Landmark	RDH	Range Division-Hawai'i
NHO	Native Hawaiian Organization	REC	Record of Environmental Consideration
NHPA	National Historic Preservation Act of 1966	RFRA	Religious Freedom Restoration Act
NHPA	No Historic Properties Affected	ROA	Record of Availability
NOAA	National Oceanic and Atmospheric Administration	ROD	Record of Decision
NOI	Notice of Intent	ROI	Region of Influence
NPS	National Park Service	RPLANS	Real Property Planning and Analysis System
NR	National Register (also called the National Register of Historic Places)	RPMP	Real Property Master Plan
NREC	Contributing Element of a National Register Eligible District	RSC	Regional Support Command
NRHP	National Register of Historic Places (also called the National Register)	RTLTP	Range and Training Land Program
O&M	Operation and Maintenance	SALT	Strategic Arms Limitation Treaty
		SBCT	Stryker Brigade Combat Team
		SBER	Schofield Barracks East Range
		SBMR	Schofield Barracks Military Reservation
		SBSR	Schofield Barracks South Range
		SBWR	Schofield Barracks West Range

SDSFIE	Spatial Data Standards for Facilities, Infrastructure, and Environment
SHPD	State Historic Preservation Division, DLNR
SHPO	State Historic Preservation Office/Officer
SOI	Secretary of the Interior
SOP	Standard Operating Procedure
SRTA	Short-Range Training Ammunition
STARCOM	Strategic Army Communications Network
SUP	Special Use Permit
TAMC	Tripler Army Medical Center
TBD	To Be Determined
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Officer
TMC	Tripler Medical Center
TRADOC	U.S. Army Training and Doctrine Command
TSS	Training Support System
UPH	Unaccompanied Personnel Housing
U.S.	United States
USACE	U.S. Army Corps of Engineers
USACERL	U.S. Army Construction Engineering Research Laboratory
USAEC	U.S. Army Environmental Command
USAG	U.S. Army Garrison
USAG-HI	U.S. Army Garrison, Hawai'i
USARHAW	U.S. Army, Hawaii
USARPAC	U.S. Army, Pacific
USASCH	U.S. Army Support Command, Hawai'i
USC	United States Code
USCINCPAC	Headquarters, Commander in Chief, U.S. Pacific Command
USPACOM	U.S. Pacific Command
VA	Veterans Affairs
WAAF	Wheeler Army Airfield
WARC	Waianae Army Recreation Center
WPA	Works Progress Administration
WWI	World War I
WWII	World War II

8.2. APPENDIX B: USAG-HI DPW ENV Cultural Resources Material Remains and Associated Records Curation Standards

USAG-HI DPW ENV Cultural Resources

Material Remains Curation Standards

The following standards are applicable to all material remains generated from this contract:

- I. A collection shall have an item-level inventory of all material remains.
 - a) The inventory should be in both hard copy and electronic form.
 - b) An explanation of the cataloging system must accompany the inventory.
 - c) An inventory of any specimens or samples discarded in the lab shall be submitted as a separate file, along with the reason(s) for discard.
- II. Artifacts and samples must be appropriately cataloged and secured according to state and federal standards. Artifacts, with the exception of those needing specialized analysis, shall be cleaned.
- III. Artifacts and other material remains shall be catalogued with their primary containers labeled to include appropriate governmental jurisdiction site numbers and provenience. Items can be grouped by material type, placed in bags with the exterior permanently labeled, and a Mylar strip or acid-free paper label containing all appropriate provenience information placed within the bag.
 - a) In most cases, artifacts and other material remains shall be stored in polyethylene, zip-lock plastic bags.
 - b) Natural fiber cloth bags are an acceptable alternative, provided they can be securely closed and labeled with the appropriate information, including provenience.
- IV. All artifacts and material remains shall be organized by sequential bag number and placed in archivally-stable storage boxes. Each box should have a specimen/object inventory enclosed, be organized by project, and be in excellent condition.
 - a) Material remains shall be housed by provenience when possible. Materials may also be submitted in the analytical categories used for analysis and reporting, following the sequential numbers within each category.
 - b) If more than one layer is to be included in the box, a tray, or similar separation must be used to prevent the crushing of material. Fragile items requiring special, archivally-stable packaging may be placed within the same box as other material, if the secondary container provides adequate protection.
 - c) The boxes should be labeled on their exterior surface with the Contractor name, contract number, project name, and site(s). It is preferred that each box have a clear invoice label holder containing the box label.
 - d) Each box shall contain an itemized inventory listing of its contents keyed to a master inventory of the collection.

USAG-HI DPW ENV Cultural Resources

Associated Records Curation Standards

The following standards are applicable to all associated records generated from this contract:

I. There shall be an inventory of all associated records in both hard copy and electronic form.

II. Field Documentation

Includes but is not limited to: field notes, site forms, sketches, field bag lists, and photo documentation.

- 1) An archivally-stable hard copy of all original field documentation is required.
 - a) Pertinent digital images, including images used in the report, must also be submitted as 4"x6" photographic prints (or digital equivalent).
- 2) An electronic copy of all field documentation stored on archival CD or DVD shall be submitted. File specifications may vary depending on task order but the following can be used as guidelines:
 - a) Photographic prints generally shall be scanned at a minimum resolution of 4,000 pixels across the longest dimension, 24-bit, TIFF format.
 - b) Electronic, born digital, images shall be submitted at minimum 3 MB, TIFF files. Alternative acceptable file types are RAW and JPEG2000.
 - c) Other records shall be scanned at a minimum of 200 PPI (pixels per inch) at original size. Preferred file format is PDF/A.
- 3) Each collection shall contain original photographs and a photograph catalog.
 - a) Photographic materials shall be organized by film type (e.g., roll film, sheet film, 35mm slides, prints, digital, etc.) and in chronological sequence.
 - b) All photographic materials shall be stored in archivally-stable containers, such as archival photo sleeves, or in consultation with the Cultural Resources Manager.
 - c) Photographic prints shall be marked on the reverse side in pencil with corresponding photo log title information or a unique inventory number keyed to a photo catalog.

III. Laboratory Documentation

Includes but is not limited to: lab metrics, lab testing reports, lab notes, applied artifact cleaning and conservation techniques, and lab discard records.

- 1) All original laboratory records and analysis reports are required.
- 2) Additionally, an electronic copy of all records, scanned at a minimum of 200 PPI, at original size, and stored on archival CD or DVD shall be submitted.
 - a) The Master Artifact/Sample Catalogue must be included.
 - b) A list of conserved objects along with a description of the techniques applied to objects during cleaning, preservation, and/or analyzing shall accompany the collection. The list shall also indicate if any objects require future conservation treatment or testing.

IV. Maps and Archival Research

All pertinent maps used and generated by this contract shall be considered part of the collection. This includes, but may not be limited to, USGS maps, regional and project area maps, site survey and excavation maps, collection grid maps, and excavation unit profiles and plans.

- 1) These pertinent maps shall be listed within the inventory of associated records.
- 2) Project location, USGS, and regional maps shall also be required to be submitted electronically in a format that shall be specified in each task order or in consultation with the Cultural Resources Manager.

The following definitions are applicable to the terms used in the curation standards:

- The term **“archival quality”** is a term used to designate materials or products that are permanent, durable, and/or chemically stable, and, therefore, can be safely used for preservation purposes.
- **“Archivally-stable”** material for records means lignin-free and acid-free. Archivally-stable boxes are lignin-free, acid-free, and buffered. Artifact bagging should be done with archive quality plastic bags, 4 millimeters in thickness. Plastics safe for archival storage include: Mylar, polypropylene, and polyethylene.

8.3 APPENDIX C: Draft FONSI and Environmental Assessment

Environmental Assessment and
Draft Finding of No Significant Impact

**IMPLEMENTATION OF THE
U.S. ARMY GARRISON, HAWAI'I
AND
U.S. ARMY GARRISON, PŌHAKULOA
INTEGRATED CULTURAL RESOURCES MANAGEMENT PLANS**

PREPARED FOR
U.S. ARMY GARRISON, HAWAI'I

PREPARED BY
COLORADO STATE UNIVERSITY
CENTER FOR ENVIRONMENTAL MANAGEMENT OF MILITARY LANDS
(CEMML)
FORT COLLINS, CO 80523



September 2017

DRAFT FINDING OF NO SIGNIFICANT IMPACT

**IMPLEMENTATION OF
THE U.S. ARMY GARRISON, HAWAI'I
AND
U.S. ARMY GARRISON, PŌHAKULOA
INTEGRATED CULTURAL RESOURCES MANAGEMENT PLANS
2017**

INTRODUCTION

An Environmental Assessment (EA) was prepared to analyze the potential for significant environmental impacts associated with the implementation of the United States Army Garrison, Hawai'i (USAG-HI) Integrated Cultural Resources Management Plan (ICRMP) and United States Army Garrison, Pōhakuloa (USAG-Pōhakuloa) ICRMP.

The EA was prepared in accordance with, and adheres to, the National Environmental Policy Act (NEPA) processes as outlined by the Council on Environmental Quality (CEQ) guidelines 40 CFR 1500-1508, *Protection of Environment*, and 32 CFR Part 651, *Environmental Analysis of Army Actions*.

PROPOSED ACTION

The Proposed Action, implementation of the USAG-HI and USAG-Pōhakuloa ICRMPs, is the preferred alternative. The purpose of the Proposed Action is to enable USAG-HI and USAG-Pōhakuloa to support the military mission by managing cultural resources in compliance with rules and regulations and in accordance with established practices of cultural resources management. The ICRMPs include goals and objectives for addressing specific cultural resources management needs and prioritize education and coordination with the many other programs and activities that may interact with cultural resources on USAG-HI and USAG-Pōhakuloa managed lands. Cultural resources management on USAG-HI and USAG-Pōhakuloa sub-installations is currently guided by existing Army guidance documents and federal laws and regulations.

The Department of Defense (DoD), the Department of the Army, USAG-HI and USAG-Pōhakuloa are required by Department of Defense Instruction (DoDI) 4715.16, *Cultural Resources Management*, and Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*, to implement and maintain ICRMPs. An ICRMP is an instrument for compliance with the statutory management requirements of applicable statutes and regulations and provides specific procedures to comprehensively manage cultural resources while sustaining the Army's capability to successfully achieve its mission. An ICRMP is an integral part of an installation's master plan.

ALTERNATIVES ANALYZED IN THE EA

No alternatives other than the Proposed Action would satisfy the purpose and need of the proposed project as preparation and full implementation of ICRMPs are required by DoDI 4715.16 and AR 200-1. Other alternatives, including partial implementation of an ICRMP, were dismissed in favor of complying with DoD and Army regulations. Therefore, no additional alternatives except the “No Action” alternative was considered in the EA.

AGENCY AND PUBLIC PARTICIPATION

This draft Finding of No Significant Impact (FNSI) has been issued in conjunction with the EA and incorporates it by reference. These documents, along with the ICRMPs, are being made available for a 30-day comment period, during which time all comments submitted by agencies, organizations, or members of the public on the Proposed Action will be considered.

Comments can be emailed to usaghi.pao.comrel@us.army.mil or mailed to the Environmental Division, Directorate of Public Works, United States Army Garrison, Hawai'i, 947 Wright Avenue, Wheeler Army Airfield, Schofield Barracks, Hawai'i 96857-5013.

ENVIRONMENTAL ANALYSIS

Based upon the analysis contained in the EA, implementation of the Proposed Action would have no significant direct, indirect, or cumulative adverse impacts on environmental or socioeconomic resources. Impacts associated with the Proposed Action were found to be temporary and negligible in context and intensity. Implementation of the ICRMPs would provide long-term beneficial impacts to historic and cultural resources by ensuring compliance with rules and regulations in support of the military mission; providing direction and guidance for management activities; and improving the coordination process between the Cultural Resources Section and project proponents.

The legal requirements of DoDI 4715.6 and AR 200-1 mandate that Army installations develop and implement an ICRMP for use as a planning tool and as the guiding document for cultural resources management decisions. The ICRMPs articulate management procedures and long-range goals for cultural resources on USAG-HI and USAG-Pōhakuloa managed lands.

FINDING

Based on information compiled and analyzed during preparation of the EA, the USAG-HI finds that the Proposed Action to implement the USAG-HI and USAG-Pōhakuōloa ICRMPs would not result in significant impacts to either the man-made or natural environment. Therefore, an environmental impact statement is not required.

Approved:

Stephen Dawson

Stephen Dawson
Colonel, US Army Garrison, Hawaii

Commanding


10/20/17

Date

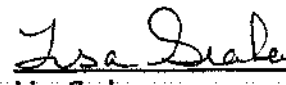
ENVIRONMENTAL ASSESSMENT
for
Implementation of the
U.S. Army Garrison, Hawai'i
and
U.S. Army Garrison, Pōhakuloa
Integrated Cultural Resources Management Plans

September 2017


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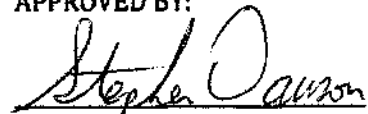

Date 10/20/17
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TABLE OF CONTENTS

Table of Contents	vi
List of Acronyms	viii
Chapter 1 PURPOSE AND NEED FOR THE PROPOSED ACTION	10
1.1 How to Read this Environmental Assessment.....	10
1.2 Introduction.....	10
1.3 Purpose and Need for Action	11
1.4 Scope of the Document.....	11
1.5 Agency and Public Participation.....	15
1.6 Alternatives Considered.....	15
Chapter 2 DESCRIPTION OF THE PROPOSED ACTION.....	17
2.1 Military Mission and Command Structure	17
2.1.1 <i>United States Army Garrison-Hawai‘i (USAG-HI)</i>	17
2.1.2 <i>United States Army Garrison-Pōhakuloa (USAG-Pōhakuloa)</i>	17
2.2 Cultural Resources Management.....	18
2.3 ICRMP Implementation.....	19
2.3.1 <i>ICRMP Goals</i>	19
2.3.2 <i>ICRMP Objectives</i>	19
2.3.3 <i>Standard Operating Procedures</i>	21
2.3.4 <i>Five-Year Management Plans</i>	21
2.3.5 <i>Staffing</i>	22
2.3.6 <i>Partners and Coordination</i>	23
Chapter 3 ALTERNATIVES CONSIDERED	24
3.1 Alternatives Considered.....	24
3.2 No Action Alternative.....	24
Chapter 4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	25
4.1 Introduction	25
4.2 Environmental Factors Not Analyzed in this EA.....	25
4.3 Environmental Factors Analyzed in this EA	25
4.3.1 <i>Military Mission and Land Use</i>	26
4.3.2 <i>Air Quality</i>	29
4.3.3 <i>Soils</i>	30
4.3.4 <i>Water Resources</i>	31
4.3.5 <i>Native Ecosystems and Biological Diversity</i>	32
4.3.6 <i>Threatened and Endangered Species</i>	33
4.3.7 <i>Invasive Species</i>	35
4.3.8 <i>Cultural Resources</i>	36
4.3.9 <i>Aesthetic and Visual Resources</i>	44
4.4 Socioeconomics, Protection of Children and Private Property, Environmental Justice...	45
4.5 Cumulative Effects.....	46
4.6 Irreversible and Irretrievable Commitment of Resources	47

Chapter 5	CONCLUSION	48
5.1	Conclusion.....	50
Chapter 6	CONSULTATION AND COORDINATION	51
6.1	Agency Consultation and Coordination.....	51
6.2	Public Involvement	51
Chapter 7	LIST OF PREPARERS.....	52
Chapter 8	REFERENCES	53

LIST OF FIGURES

FIGURE 1-1: ISLAND OF O‘AHU SUB-INSTALLATIONS.....	13
FIGURE1-2: ISLAND OF HAWAI‘I SUB-INSTALLATIONS.....	14

LIST OF TABLES

TABLE 2-1: USAG-HI PROJECTS FOR THE FIVE-YEAR PLANNING PERIOD (FY 2017-2021).....	21
TABLE 2-2: USAG-PŌHAKULOA PROJECTS FOR THE FIVE-YEAR PLANNING PERIOD (FY 2017-2021).....	22
TABLE 4-1: USAG-HI AND USAG-PŌHAKULOA SUB-INSTALLATIONS ANALYZED IN THIS EA.....	27
TABLE 5-1: SUMMARY OF ENVIRONMENTAL, SOCIAL, AND ECONOMIC IMPACTS.....	48

LIST OF ACRONYMS

AMR	Āliamanu Military Reservation
AR	Army Regulation
ARPA	Archaeological Resources Protection Act
CA	Comprehensive Agreement
CEQ	Council on Environmental Quality
CRM	Cultural Resource Manager
DoD	Department of Defense
DoDI	Department of Defense Instruction
DMR	Dillingham Military Reservation
DPW	Directorate of Public Works
DRD	Drum Road (Pūpūkea-Pa'ala'a-Uka Military Road)
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
FDR	Fort DeRussy Military Reservation
FNSI	Finding of No Significant Impact
FSK	Field Station Kunia
FSMR	Fort Shafter Military Reservation
FY	Fiscal Year
GIS	Geographic Information System
HAW	Hawai'i Army Weekly
HBMP	Hawai'i Biodiversity and Mapping Program
HPC	Historic Property Component Plans
HMR	Helemano Military Reservation
ICRMP	Integrated Cultural Resource Management Plan
IMCOM-PAC	Installation Management Command-Pacific
KAS	Kīpapa Ammunition Storage Site
KLOA	Kawailoa Training Area
KMC	Kīlauea Military Camp
KTA	Kahuku Training Area
MAB	Mokulē'ia Army Beach
MKS	Mauna Kapu Communication Station Site
MOU	Memoranda of Understanding
MMR	Mākua Military Reservation
NAGPRA	Native American Grave Protection and Repatriation Act
NEPA	National Environmental Policy Act of 1969
NEV	Not Yet Evaluated
NHL	National Historic Landmark
NHO	Native Hawaiian Organization
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
NRP	Natural Resources Program
PTA	Pōhakuloa Training Area
RPLANS	Real Property Planning and Analysis System
SBER	Schofield Barracks East Range
SBMR	Schofield Barracks Military Reservation

SBWR	Schofield Barracks West Range
SBSR	Schofield Barracks South Range
SHPD	State Historic Preservation Division
SHPO	State Historic Preservation Office
SOP	Standard Operating Procedure
TAMC	Tripler Army Medical Center
TNC	The Nature Conservancy
UPH	Unaccompanied Personal Housing
USACE	United States Army Corps of Engineers
USAEC	United States Army Environmental Command
USAG-HI	United States Army Garrison, Hawai'i
USAG-Pōhakuloa	United States Army Garrison, Pōhakuloa
USPACOM	United States Pacific Command
USARHAW	United States Army Hawai'i
USARHAW TSS	United States Army Hawai'i Training Support Systems
USARPAC	United States Army Pacific
WAAF	Wheeler Army Airfield
WAST	Waikakalaua Ammo Storage Tunnels Site
WMR	Waianae-Kai Military Reservation

CHAPTER 1 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 How to Read this Environmental Assessment

Chapter 1: Purpose and Need for the Proposed Action describes the purpose and need for U.S. Army Garrison, Hawai'i (USAG-HI) and U.S. Army Garrison, Hawai'i Pōhakuloa (USAG-Pōhakuloa) to implement Integrated Cultural Resources Management Plans (ICRMPs) for sub-installations on the islands of O'ahu and Hawai'i. This chapter also describes the scope of this environmental assessment (EA); summarizes the agency and public participation process; and provides a brief overview of the Proposed Action and the alternatives considered.

Chapter 2: Description of Proposed Action provides an in-depth discussion of the Proposed Action, which is ICRMP implementation for both USAG-HI and USAG-Pōhakuloa sub-installations.

Chapter 3: Alternatives Considered examines alternatives to the Proposed Action.

Chapter 4: Affected Environment and Environmental Consequences presents the affected environment, resources with the potential to be impacted, and analyzes any plausible environmental, cultural, social, and economic consequences that are projected to occur from implementing the preferred alternative and the No Action Alternative.

Chapter 5: Conclusions summarizes potential effects associated with the alternatives and recommends which alternative should be implemented.

Chapter 6: Agencies and Persons Consulted lists the agencies and the persons/groups that were consulted during this process.

Chapter 7: List of Preparers lists the individuals who prepared this EA.

Chapter 8: References documents the sources referenced in this analysis.

1.2 Introduction

USAG-HI and USAG-Pōhakuloa propose to implement two separate ICRMPs to integrate the entirety of Garrison Cultural Resources Sections with ongoing mission activities and to consolidate legal responsibilities into an efficient and coherent cultural resources program. The ICRMPs include goals and objectives for addressing specific cultural resources management needs and prioritize education and coordination with the many other programs and activities that may interact with cultural resources on USAG-HI and USAG-Pōhakuloa managed lands.

The Department of Defense (DoD), the Department of the Army, USAG-HI, and USAG-Pōhakuloa are required by Department of Defense Instruction (DoDI) 4715.16, *Cultural Resources Management*, and Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*, to implement and

maintain ICRMPs. An ICRMP is an instrument for compliance with the statutory management requirements of applicable statutes and regulations and provides specific compliance procedures to comprehensively manage cultural resources while sustaining the Army's capability to successfully achieve its mission. An ICRMP is an integral part of an installation's master plan.

This EA addresses the requirements of the National Environmental Policy Act (NEPA) of 1969 and adheres to the NEPA processes as outlined by the Council on Environmental Quality (CEQ) guidelines 40 CFR 1500-1508 *Protection of Environment*, and 32 CFR Part 651, *Environmental Analysis of Army Actions*. This EA informs decision-makers and the public of the possible environmental consequences of following the Proposed Action and the "no action" alternative of maintaining the status quo by evaluating the direct and indirect environmental and socioeconomic impacts of each alternative. This EA also addresses the potential for cumulative effects from the action when added to past and reasonably foreseeable future impacts.

1.3 Purpose and Need for Action

The purpose of the Proposed Action is to ensure that USAG-HI and USAG-Pōhakuloa make informed decisions regarding cultural resources, in compliance with rules and regulations, supportive of the military mission, and in accordance with established practices of cultural resources management. Adopting and implementing both USAG-HI and USAG-Pōhakuloa ICRMPs will provide comprehensive guidance for the identification, protection, preservation, restoration, and enhancement of cultural resources on Garrison-managed lands. ICRMPs are needed to ensure successful stewardship of cultural resources and to maintain compliance with DoDI 4715.16 and AR 200-1. ICRMPs ensure consistency in application by consolidating management principles included in over 40 separate statutes, regulations, and other binding guidance that dictate the responsibilities for managing cultural resources on military lands. Implementation of the Proposed Action would fulfill USAG-HI and USAG-Pōhakuloa requirements to maintain mission readiness and will improve coordination between management units at 19 sub-installations managed by USAG-HI on the island of O'ahu and three sub-installations managed by USAG-Pōhakuloa on the island of Hawai'i.

Cultural resources management on USAG-HI and USAG-Pōhakuloa sub-installations is currently guided by existing Army guidance documents and federal laws and regulations. Programmatic agreements and memorandums of agreement are enacted in accordance with regulations.

1.4 Scope of the Document

This EA analyzes the potential environmental and socioeconomic impacts associated with the No Action Alternative of continuing existing management direction and the potential impacts of the preferred alternative: implementation of both the USAG-HI and USAG-Pōhakuloa ICRMPs. The ICRMPs provide guidance for the following 22 sub-installations on the islands of O'ahu and Hawai'i:

O 'ahu (USAG-HI)

Cantonments

Āliamanu Military Reservation (AMR)
Fort Shafter Military Reservation (FSMR)
Helemano Military Reservation (HMR)
Tripler Army Medical Center (TAMC)
Wheeler Army Airfield (WAAF)

Training Areas

Dillingham Military Reservation (DMR)
Kahuku Training Area (KTA)
Kawailoa Training Area (KLOA)
Mākua Military Reservation (MMR)
Schofield Barracks Military Reservation (SBMR)

Recreational Areas

Fort DeRussy Military Reservation (FDR)
Mokulē'ia Army Beach (MAB)
Pirilā'au Army Recreation Center (PARC) located within Wai'anae Kai Military Reservation (WMR)

Other Use Areas

Kīpapa Ammunition Storage Site (KAS)
Field Station Kunia (FSK)
Mauna Kapu Communication Station Site (MKS)
Pūpūkea-Pa'ala'a-Uka Military Road (Drum Road) (DRD)
Signal Cable Trunking System
Waikakalaua Ammo Storage (WAS)

Hawai'i (USAG-Pōhakuloa)

Kawaihae Military Reservation
Kīlauea Military Camp (KMC)
Pōhakuloa Training Area (PTA)

This EA does not attempt to provide a quantitative analysis of site-specific impacts from individual projects that will be implemented during the next five-year funding period (FY2017-FY2021). Consistent with NEPA and other applicable statutes and regulations, additional analysis will be considered to analyze any impacts, prior to proceeding with specific projects or installation training activities that may affect cultural resources.

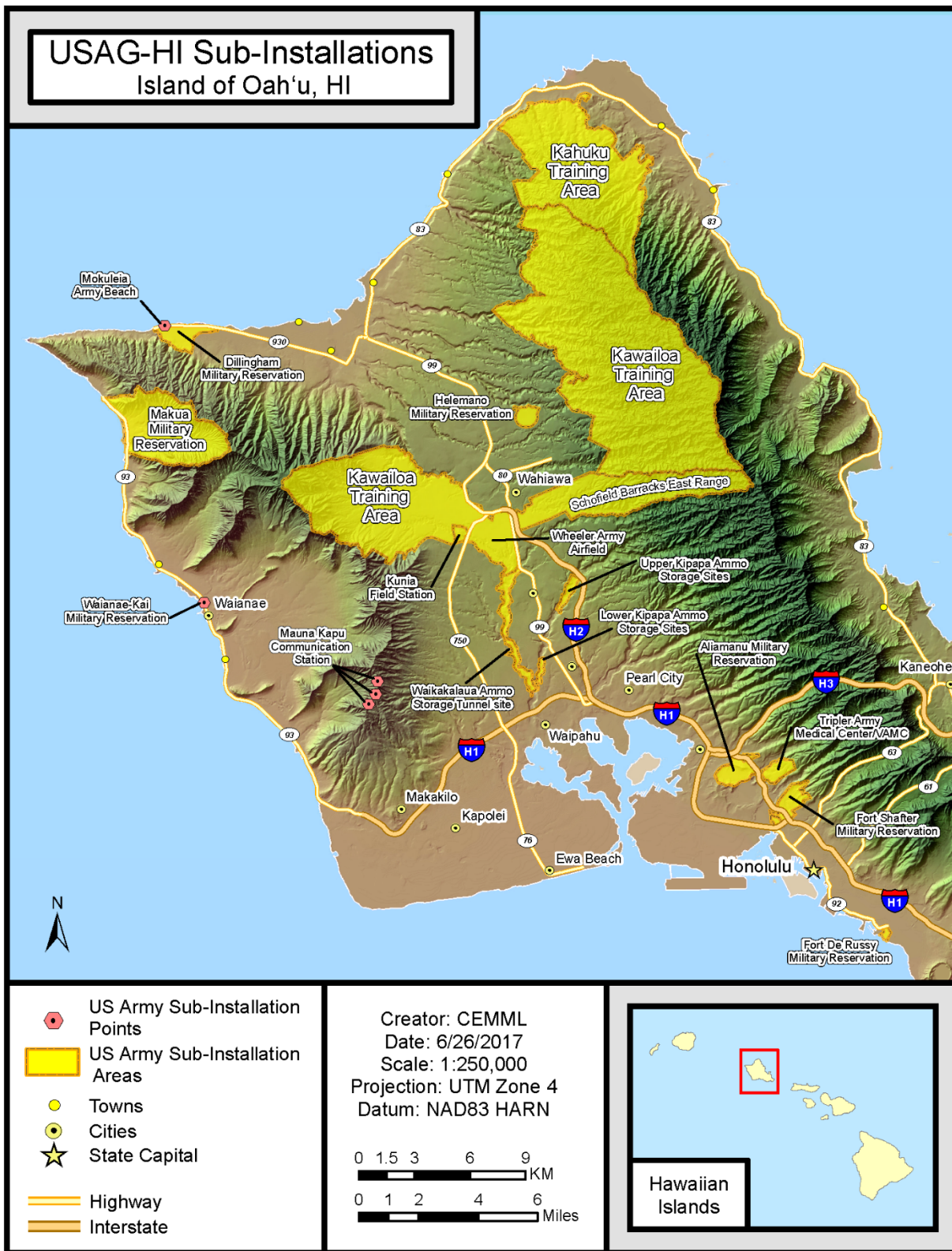


Figure 1-1: Island of O‘ahu Sub-installations

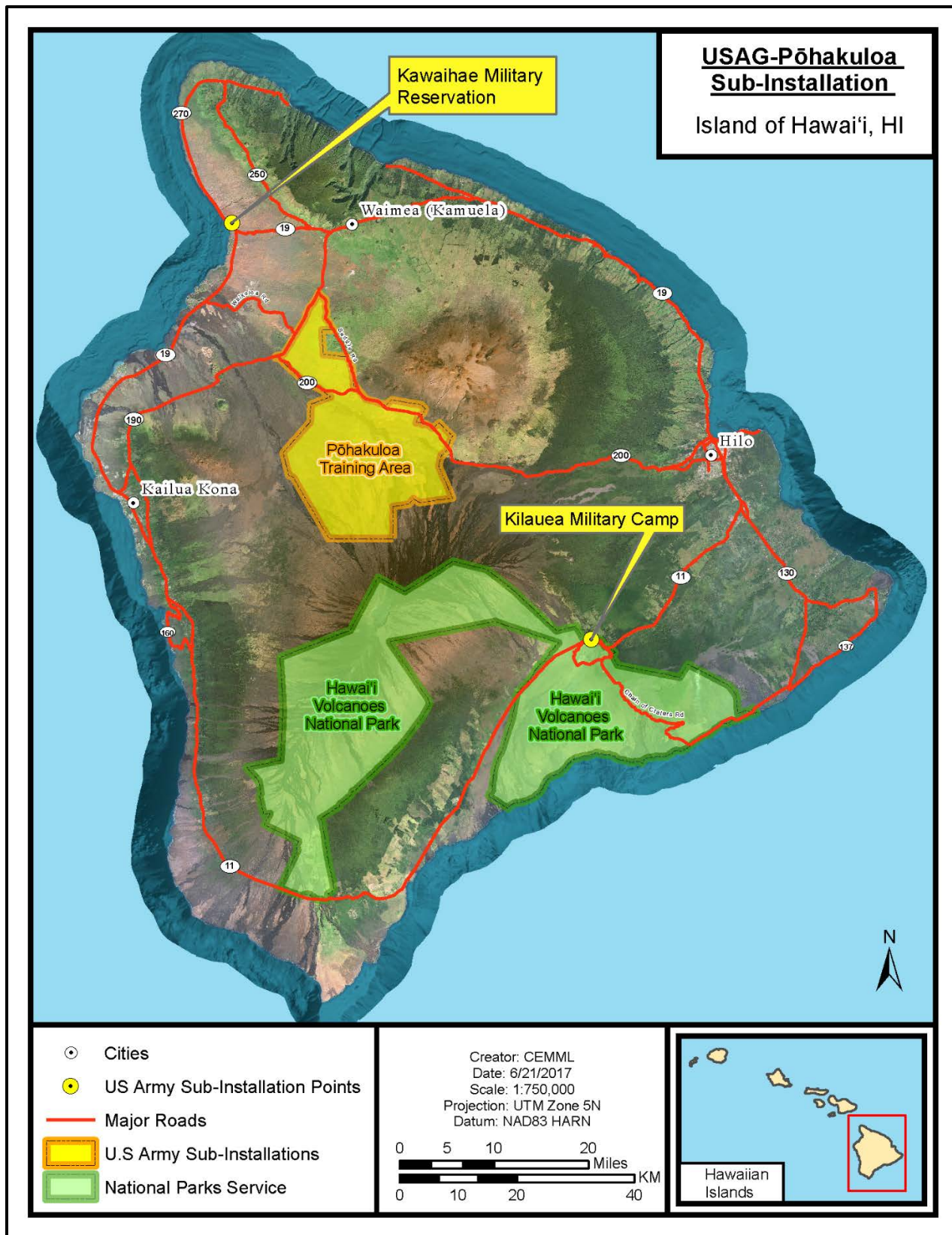


Figure1-2: Island of Hawai'i Sub-installations

1.5 Agency and Public Participation

Public participation in the NEPA process promotes informed decision-making and open communication between the public and the government. Based upon the analysis conducted in this EA, adoption and implementation of both ICRMPs, as written, would not constitute a major federal action significantly affecting the equality of the human environment. A draft Finding of No Significant Impact (FNSI) has been issued along with this EA. These documents, along with the ICRMPs, are being made available for a 30-day comment period, during which time all comments submitted by agencies, organizations, or members of the public on the Proposed Action will be considered.

Notice of public comment periods and availability of the documents are being advertised in the Star-Advertiser, Hawai'i Tribune Herald, and West Hawai'i Today. Individuals and organizations that have expressed interest in cultural resources on Army lands, including Native Hawaiian Organizations (NHOs), will receive notification via email or mail of the availability of the ICRMPs and EA and draft FNSI for public review and comment. All persons, agencies, and organizations, including Native Hawaiian groups, minorities, low income, or disadvantaged individuals, are encouraged to review and provide comments on the EA and draft FNSI. Agency and public participation is an essential and beneficial requirement of the NEPA process. The ICRMPs and the EA and draft FNSI will be sent to the Hawai'i State Historic Preservation Division (SHPD) and the Office of Hawaiian Affairs (OHA). Additionally, the ICRMPs and the EA and draft FNSI will be available on the Army's website: <https://www.garrison.hawaii.army.mil/NEPA/NEPA.htm>.

Hard copies will be available at the following public libraries:

- Island of O'ahu library locations
 - Honolulu Library
 - Waianae
 - Waialua Library
 - Mililani Library
 - Wahiawā Library

- Island of Hawai'i library locations
 - Hilo Library
 - Kona Library
 - Waimea Library

1.6 Alternatives Considered

Early in the planning process it was determined that no alternatives other than the Proposed Action would satisfy the purpose and need of the proposed project. Two alternatives, the Proposed Action and the No Action Alternative, were evaluated for their potential direct, indirect, and cumulative effects on the human environment. The Proposed Action would involve full implementation of the ICRMPs, as required by law. The No Action Alternative is the continuation of management activities currently being conducted without an ICRMP. If the No Action Alternative was to be selected, the ICRMP would not be implemented, and USAG-HI and USAG-Pōhakuloa would not be in compliance

with DoD and Army regulations. The No Action Alternative analysis within this EA serves as a baseline to compare with the environmental consequences of implementing the Proposed Action. Because implementation of the ICRMP is a regulatory requirement, USAG-HI and USAG-Pōhakuloa did not consider additional alternatives.

CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action is to implement both the USAG-HI ICRMP and USAG-Pōhakuloa ICRMP. The ICRMPs provide direction for routine activities that may impact cultural resources and also guidance for carrying out management activities outlined in the Standard Operating Procedures (SOPs) chapter of the plan. Implementing both ICRMPs promotes:

- USAG-HI and USAG-Pōhakuloa personnel with making informed decisions regarding the cultural resources under their control, resulting in more effective and efficient management of cultural resources.
- USAG-HI and USAG-Pōhakuloa compliance with cultural resource statutes and regulations and other binding commitments.
- Support of the military mission.
- Consistency in application of cultural resource management principles.

2.1 Military Mission and Command Structure

2.1.1 U.S ARMY GARRISON, HAWAI‘I (USAG-HI)

The mission for USAG-HI is “The most innovative, customer-focused garrison in the Army, ensuring our supported unit’s mission accomplishment and supported community’s sustainment.”

USAG-HI manages all Army installations in Hawai‘i. USAG-HI provides installation management service and logistical support for approximately 93,700 Soldiers, civilian personnel, military retirees and dependents, and others. Many of USAG-HI’s responsibilities are comparable to the operation of a mid-size urban area, with purview over housing, roads, utilities, schools, libraries, recreational facilities and programs, safety and emergency responses, and other amenities that support the mission and both life and work of those on the installation.

The USAG-HI Commander reports to both the Pacific Region of the Installation Management Command-Pacific (IMCOM-PAC) and to the Senior Military Commander of the United States Army, Hawai‘i (USARHAW). USAG-HI maintains oversight and support responsibilities for the subordinate, indirect garrison of USAG-Pōhakuloa, and jointly with USAG-Pōhakuloa facilitates cultural resources responsibilities of the Army at Pōhakuloa Training Area (PTA), Kawaihae Military Reservation, and Kīlauea Military Camp (KMC). While USAG-HI is responsible for basic support and management services; there are many military commands and units working within the installations. The activities and requirements of these units affect the demands facing cultural resources management within USAG-HI jurisdiction.

2.1.2 U.S. ARMY GARRISON, PŌHAKULOA (USAG-PŌHAKULOA)

The mission for USAG-Pōhakuloa is to “provide support for single service, Joint, and Combined training to afford warfighters the most realistic and flexible training environment available in the Pacific.”

The USAG-Pōhakuloa Commander has command and control authority for PTA as an indirect Garrison to USAG-HI and reports to both the U.S. Army Pacific (USARPAC) Command and IMCOM-PAC through USAG-HI Command and USARHAW. PTA is the primary tactical training area that provides the United States Pacific Command (USPACOM) Commander with joint/multinational training capabilities to support home-station training, joint training, and enables theater regional engagements. As a remote location, PTA is ideally suited for emergency deployment readiness exercises, regional Joint Reception, Staging, Onward Movement and Integration training, and multinational exercises in support of Theater Security Cooperation Programs and Shaping Operations.

USAG-HI activities support USAG-Pōhakuloa staff with technical oversight, as well as continued administrative and logistical support as USAG-Pōhakuloa grows its capabilities. USAG-Pōhakuloa also has oversight of KMC and Kawaihae Military Reservation and provides cultural resources support for both. The USAG-Pōhakuloa actively supports USAG-HI tenant activities, organizations, and units when they deploy to PTA for training. Tenants are required to notify the CRM of any potential changes to historic properties and to coordinate National Historic Preservation Act (NHPA) Section 106 processes through the USAG-Pōhakuloa Cultural Resources Section.

2.2 Cultural Resources Management

The major goal of a cultural resources program is to “develop and implement procedures to protect against encumbrances to mission by ensuring that Army installations effectively manage cultural resources” (U.S. Army 2007). The USAG-HI and USAG-Pōhakuloa Commanders ensure that USAG-HI and USAG-Pōhakuloa sub-installations meet the general cultural resources requirements assigned. As the leading authority in charge of cultural resources, the Garrison Commanders are specifically designated as the federal agency official for purposes of the NHPA (36 CFR § 800), as the Federal Land Manager for purposes of the Archaeological Resources Protection Act (ARPA) (32 CFR § 229), as the Federal Agency Official with management authority over archeological collections and associated records (36 CFR § 79), and as the Federal Agency Official for purposes of the Native American Graves Protection and Repatriation Act (NAGPRA) (43 CFR § 10).

The USAG-HI cultural resource manager (CRM) is appointed by the USAG-HI Commander. The USAG-Pōhakuloa CRM is appointed by the USAG-Pōhakuloa Commander. CRMs provide day-to-day management of cultural resources and ensure that all installation activities are in compliance with applicable cultural resources requirements, serve as liaisons between all persons involved in implementing the ICRMP, and carry out the cultural resource management activities as outlined in the SOPs.

2.3 ICRMP Implementation

2.3.1 ICRMP GOALS

Both ICRMPs provide the necessary authority to manage the cultural resources contained within all 22 sub-installations. ICRMPs are reviewed and updated every year to ensure accuracy, and revised approximately every five years as needed. The overall purpose of an ICRMP is to incorporate guidelines and consolidate procedures for cultural resources management into a single document to more efficiently fulfill management responsibilities. The USAG-HI and USAG-Pōhakuloa ICRMPs share the following goals:

- Meet USAG-HI and USAG-Pōhakuloa obligations for compliance with NHPA, NEPA, NAGPRA, ARPA and other legal requirements in an efficient and effective manner consistent with DoD standards while minimizing effects on the military mission.
- Enforce federal laws that prohibit vandalism of cultural resources on federal properties through law enforcement, monitoring, and public awareness.
- Ensure that current and planned installation programs, plans, and projects are integrated with cultural resources management initiatives.
- Identify and evaluate cultural resources eligibility for inclusion in the National Register of Historic Places (NRHP) and maintain an up-to-date inventory of historic properties.
- Avoid or minimize adverse effects on historic properties that meet eligibility criteria for inclusion in the NRHP.
- Preserve significant historic properties whenever possible and mitigate in accordance with the outcome of consultation in the long-term public interest when adverse effects cannot be avoided.
- Ensure that appropriate consultation procedures are followed at the earliest planning stage of any undertaking that may affect historic properties.
- Maintain a cultural resources program staff that meets the *Secretary of the Interior Professional Qualification Standards* (36 CFR §61).
- Maintain confidentiality regarding the nature and location of cultural resources unless the federal agency determines that it would not create a risk of harm to the sites and would further the purposes of ARPA.
- Maintain curation of archaeological collections and records, and orderly control of the technical libraries and associated records needed to support the Cultural Resources Sections pursuant to 36 CFR § 79.

2.3.2 ICRMP OBJECTIVES

The planning objectives for both ICRMPs are to improve coordination between proponents and CRMs and encourage use of the DPW GIS for more reliable exchange of planning information among programs. Compiling and maintaining the locations, extent, and important attributes of each known cultural resource will help the Cultural Resources Sections to provide the best available current data for all planners within both USAG-HI and USAG-Pōhakuloa sub-installations.

The ICRMPs provide direction for routine activities that may impact cultural resources by establishing SOPs, identifying various public consultation requirements, and providing goals that

would benefit the management of cultural resources on Garrison lands. The ICRMPs do not detail site-specific individual projects. Consistent with NEPA and other applicable statutes and regulations, additional NEPA analysis will be needed to analyze any impacts prior to proceeding with specific projects or installation training activities that may affect environmental, social, and/or economic resources.

If the preferred alternative is chosen, USAG-HI and USAG-Pōhakuloa CRMs will play a primary role in implementing the ICRMPs. The ICRMPs provide guidance for the CRMs to coordinate compliance with historic preservation laws and Army regulations on behalf of each Garrison Commander. The following objectives include all of the tasks required to plan, organize, and implement both ICRMPs:

- Complete reasonable and good faith archaeological and cultural resource inventory surveys in areas not adequately surveyed, as needed, to support training and other projects and missions.
- Conduct regular education regarding cultural resources and procedures related to them for:
 - Military personnel newly assigned to USAG-HI or USAG-Pōhakuloa.
 - Planners, project proponents, and others whose programs and actions have high potential for affecting cultural resources.
 - Members of the public who are intended to benefit from historic properties and other cultural resources.
- Improve coordination in compliance review of undertakings with emphasis on timely and effective coordination between proponents and the CRM.
- Encourage use of Directorate of Public Works (DPW)-wide Geographic Information System (GIS) for more effective and reliable exchange of planning information among programs.
- Compile and validate cultural resources spatial data in Spatial Data Standards for Facilities, Infrastructure, and Environment-compliant GIS applications.
- Compile and validate archaeological site inventory (USAG-Pōhakuloa) and Real Property Planning and Analysis System (RPLANS) data (USAG-HI).
- Complete evaluations of buildings and structures 50 years of age or older.
- Compile and validate NRHP Historic Status codes for all existing RPLANS-listed assets.
- Prepare Historic Structure Reports and/or Treatment Plans for the care and maintenance of NRHP eligible historic buildings, structures, and districts.
- Develop Programmatic Agreements with State Historic Preservation Division (SHPD) for general operations, maintenance, and development.
- Develop Programmatic Agreements with SHPD for routine training activities in training areas.
- Provide information about the USAG-HI and USAG-Pōhakuloa Cultural Resources Sections to the Public Affairs Office for inclusion in publically available websites. Website(s) should include information about cultural resources, the program, and policies, as well as current updates on major projects under review and information supporting consultations.
- Maintain an active public outreach program, especially serving military personnel, through brochures, trifolds, posters, access to historic properties, and outreach activities involving other state agencies and private organizations, schools, and the Native Hawaiian community.
- Pro-actively consult with Native Hawaiian organizations and other interested parties in accordance with DoD and Department of the Army guidance.
- Create and maintain a records management system for historic properties identified on Garrison-controlled lands, Section 106 files, and contractual documents.

- Fully integrate ICRMP actions into Integrated Natural Resources Management Plans (INRMPs), Master Planning and U.S. Army Hawai'i Training Support Systems (USARHAW TSS) range plans.

2.3.3 STANDARD OPERATING PROCEDURES

Standard Operating Procedures (SOPs) provide direction for routine activities that may have an impact on cultural resources. Each SOP identifies relevant regulations that the Garrison must follow to maintain regulatory compliance. The SOPs detailed in the ICRMPs address specific situations that are likely to occur and provides steps for the implementation and notification requirements for each event type. The following SOPs are included in both the USAG-HI and USAG-Pōhakuloa ICRMPs:

- **SOP 1:** Compliance Procedures for NHPA Section 106
- **SOP 2:** Identify and Evaluate Historic Properties
- **SOP 3:** Unanticipated Discovery of Historic Properties and Inadvertent Discovery of Human Remains and/or Cultural Items
- **SOP 4:** Emergency Situations
- **SOP 5:** Native American Grave Protection and Repatriation Act (NAGPRA): Planned activities and comprehensive agreements
- **SOP 6:** Archaeological Resources Protection Act (ARPA) of 1979 Compliance Procedures
- **SOP 7:** Native Hawaiian Consultation
- **SOP 8:** Archaeological Collections Curation and Management
- **SOP 9:** Maintenance Procedures for Historic Buildings and Structures

2.3.4 FIVE-YEAR MANAGEMENT PLANS

USAG-HI

Over the next five years (FY 2017-2021), USAG-HI expects to have undertakings that could potentially affect historic properties. These potential undertakings include routine maintenance and operations of historic buildings and ranges, construction projects, natural resources management activities, and recurring training exercises. Proponents for such undertakings include USARHAW TSS, USAG-HI and USAG-Pōhakuloa DPW, and other tenant organizations. Table 2-1 includes several such projects that USAG-HI is currently tracking that could begin within the next five years. Project planning and decision-making will involve additional environmental review to consider any potential resource impacts from the following individual projects:

Table 2-1: USAG-HI Projects for the Five-Year Planning Period (FY 2017-2021)

Sub-Installation	Proposed Project
Schofield Barracks	Construction of Company Operations Facilities and associated structures at SB 9000 Block

Sub-Installation	Proposed Project
Schofield Barracks East Range	Construction and use of training areas associated with the Jungle Operations Training Center
Wheeler Army Airfield	Adapted re-use of National Historic Landmark (NHL) Wheeler Army Airfield hangers if facility no longer meets mission standards for aviation use
Tripler Army Medical Center	Renovations of Tripler Army Medical Center
Schofield Barracks	Continue use/renovations of SB Woodies for long-term sustainability

USAG-Pōhakuloa

Over the next five years (FY 2017-2021), USAG-Pōhakuloa expects to have undertakings that could potentially affect historic properties. These potential undertakings include routine maintenance and operations of historic buildings and ranges, construction projects, natural resources management activities, and recurring training exercises. Proponents for such undertakings include USARHAW TSS, USAG-HI and USAG-Pōhakuloa DPW, and other tenant organizations. Table 2-2 includes several such projects that USAG-Pōhakuloa is tracking and that could begin within the next five years. Project planning and decision-making will involve additional environmental review to consider any potential resource impacts from the following individual projects:

Table 2-2: USAG-Pōhakuloa Projects for the Five-Year Planning Period (FY 2017-2021)

Sub-Installation	Proposed Project
Pōhakuloa Training Area	Keamuku Range Roads - Garrison MSR - Troop Construction
Pōhakuloa Training Area	Access Control Point and MP Station
Pōhakuloa Training Area	Aviation Gunnery Range
Pōhakuloa Training Area	Qualification Training Range
Pōhakuloa Training Area	Road paving projects

2.3.5 STAFFING

Full implementation of the USAG-HI and USAG-Pōhakuloa ICRMPs requires full-time cultural resources positions with technical assistance from partners, cooperators, and contractors. These

positions are already staffed; therefore, implementation of either the USAG-HI or the USAG-Pōhakuloa ICRMP will not require additional staffing.

2.3.6 PARTNERS AND COORDINATION

Department of Defense Instruction 4715.16 states “Consult in good faith with internal and external stakeholders and promote partnerships to manage and maintain cultural resources by developing and fostering positive partnerships with Federal, tribal, State, and local government agencies; professional and advocacy organizations; and the general public.” Outside agencies are those organizations, stakeholders, or interested parties that are directly involved with cultural resource management on USAG-HI and USAG-Pōhakuloa holdings. At a minimum, CRMs from both USAG-HI and USAG-Pōhakuloa consult with the following organizations:

- Hawai‘i SHPD
- Advisory Council on Historic Preservation
- NHOs
 - Hawai‘i Island Burial Council
 - O‘ahu Island Burial Council
 - Other Native Hawaiian organizations
- Historic Hawai‘i Foundation
- Hawai‘i State OHA
- National Park Service (NPS)

CHAPTER 3 ALTERNATIVES CONSIDERED

3.1 Alternatives Considered

This EA analyzes two alternatives: full implementation of the USAG-HI and USAG-Pōhakuloa ICRMPs and a No Action Alternative. The Proposed Action, implementation of both USAG-HI and USAG-Pōhakuloa ICRMPs, is the preferred alternative. Preparation and full implementation of both ICRMPs are a requirement of DoDI 4715.16 and AR 200-1. Other alternatives, including partial implementation of an ICRMP, were dismissed due to violation of Army regulations.

3.2 No Action Alternative

CEQ regulations (40 CFR 1502.14) require the alternatives analysis to include a No Action Alternative. Section 1502.14(d) of CEQ regulations interprets the update or creation of land management plans, including ICRMPs, to be considered a “no change” alternative verses a “no action” alternative. A “no change” alternative simply means there is no change from current management direction or level of management intensity (CEQ, 1981). Ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed (CEQ, 1981). USAG-HI and USAG-Pōhakuloa need to prepare and implement ICRMPs in order to maintain compliance with cultural resources management rules and regulations. The analysis within this EA for the No Action (i.e., “no change”) Alternative serves as a baseline for comparison of the environmental consequences of implementing the Proposed Action.

CHAPTER 4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This section describes the current condition of the affected environment followed by the environmental consequences of both the Proposed Action and No Action Alternative on each resource. This EA's use of the term "environment" encompasses the physical, biological, cultural, and social aspects that are potentially subject to impacts from implementing an alternative. The description of existing conditions provides the baseline for identifying and evaluating any change that may result from implementation of an alternative. The environmental consequences analysis describes the potential change or impact that could occur to each resource.

4.2 Environmental Factors Not Analyzed in this EA

The following factors are typically considered in environmental analyses, but were not assessed for the Proposed Action and No Action Alternative. Implementation of both ICRMPs will not result in quantifiable, concrete impacts to the resources listed below.

- Coastal Zone Management
- Climate
- Water Quality
- Geology and Geography (except soils)
- Economy
- Hazardous Waste Site Contamination and Cleanup
- Infrastructure
- Noise
- Prime Farmland
- Wild and Scenic Rivers

4.3 Environmental Factors Analyzed in this EA

The following environmental factors have the potential to be impacted and therefore are included in this EA for analysis of the Proposed Action and the No Action Alternatives.

- Military Mission and Land Use
- Air Quality
- Soils
- Water Resources
- Native Ecosystems and Biological Diversity
- Threatened and Endangered Species
- Invasive Species
- Cultural Resources
- Aesthetic and Visual Resources

- Socioeconomics, Protection of Children and Private Property and Environmental Justice
- Cumulative Effects
- Irreversible and Irrecoverable Commitment of Resources

4.3.1 MILITARY MISSION AND LAND USE

USAG-HI

The USAG-HI mission is “Supporting each Warrior, Family and Community with sustainable services, ensuring power projection readiness from Hawai‘i” (USAG-HI 2016).

USAG-HI’s 19 sub-installations occupy significant portions of the island of O‘ahu, particularly the central plateau and the northern Ko‘olau Range. Fort Shafter Military Reservation (FSMR), Āliamanu Military Reservation (AMR), Tripler Army Medical Center (TAMC), and Fort DeRussy Military Reservation (FDR) are all located on the southern portion of O‘ahu. Mākua Military Reservation (MMR) and Wai‘anae-Kai Military Reservation (WMR) are located on the leeward coast of O‘ahu. Dillingham Military Reservation (DMR) and Mokulē‘ia Army Beach (MAB) are located on the north shore of O‘ahu at the base of the Wai‘anae Range. Schofield Barracks Military Reservation (SBMR), including cantonment and training ranges, is situated at the crest of the central O‘ahu plateau. On the southern slope of the plateau are Wheeler Army Airfield (WAAF), Field Station Kunia (FSK), the Kīpapa Ammunition Storage Site (KAS), and the Waikakalaua Ammunition Storage (WAST) site. On the northern slope of the plateau is the Helemano Military Reservation (HMR) and the Pūpūkea-Pa‘ala‘a-Uka Military Road. Kahuku Training Area (KTA) and Kawaihoa Training Area (KLOA) are located in the northern Ko‘olau Mountains, and the Mauna Kapu Communication Station (MKS) is in the southern Wai‘anae Mountains. See Figure 1-1 for USAG-HI sub-installation locations.

USAG-Pōhakuloa

The USAG-Pōhakuloa mission is to “provide support for single service, Joint, and Combined training to afford warfighters the most realistic and flexible training environment available in the Pacific Region.”

PTA is located in the north-central portion of the island, west of the Humu‘ula Saddle, in an area formed by the convergence of three volcanic mountains: Mauna Kea, Mauna Loa, and Hualālai (INRMP-Pōhakuloa 2010). KMC is located within Hawai‘i Volcanoes National Park. USAG-Pōhakuloa owns the buildings while the National Park Service (NPS) owns the land; therefore, NPS has some ongoing responsibility for the management and care of cultural resources on that installation (USAG-Pōhakuloa ICRMP 2017). Kawaihae Military Reservation is located on the leeward west coast of the island of Hawai‘i (USAG-Pōhakuloa ICRMP 2017). See Figure 1-2 for USAG-Pōhakuloa sub-installation locations.

Table 4-1: USAG-HI and USAG-Pōhakuloa Sub-installations Analyzed in This EA

USAG-HI		
Facility	Primary Function	Size (acres)
Āliamanu Military Reservation (AMR)	Military family housing	589.4
Dillingham Military Reservation (DMR)	Training and airfield	618.1
Field Station Kunia (FSK)	Administrative, communications, storage and recreation	31.5
Fort DeRussy Military Reservation (FDR)	U.S. Army Museum of Hawai'i, and military and civilian recreation	68.6
Fort Shafter Military Reservation (FSMR)	9 th U.S. Army Reserve Command headquarters, Support command and control Army organizations and management of on-ground defense of the Pacific theater	596.1
Helemano Military Reservation (HMR)	125 th Signal Battalion Headquarters and military personnel housing	288.9
Kahuku Training Area (KTA)	Troop maneuver and training	9,493.3
Kawailoa Training Area (KLOA)	Limited use of helicopter landing zones and roads	23,539.4
Kīpapa Ammunition Storage Site (KAS)	Tsunami and earthquake detection station with limited regional ammunition storage	3,74.4
Mākua Military Reservation (MMR)	Training	4,280.4
Mauna Kapu Communication Station Site (MKS)	Communications	16.14
Mokulēia Army Beach (MAB)	Recreation	26.4
Pililā'au Army Recreation Center (PARC) within Wai'anae Kai Military Reservation (WMR)	Recreation	13.52

USAG-HI

Facility	Primary Function	Size (acres)
Pūpūkea-Pa‘ala‘a-Uka Military Road (Drum Road) (DRD)	Major transportation hub	109.25
Schofield Barracks Military Reservation (SBMR) (Includes training areas and a cantonment: Schofield Barracks East Range, South Range, West Range, and Schofield Barracks Cantonment)	Post for 25 th Infantry Division and training center	17,428.26
Signal Cable Trunking System	Inactive	0.10
Tripler Army Medical Center (TAMC)	Medical treatment	360.6
Waikakalaua Ammo Storage (WAST)	Inactive	176.1
Wheeler Army Airfield (WAAF)	Training and aviation support	1,588.0

USAG-Pōhakuloa

Facility	Primary Function	Size (acres)
Pōhakuloa Training Area (PTA)	Training	132,268
Kawaihae Military Reservation	Transportation and cargo hub	11
Kīlauea Military Camp (KMC)	Recreation	72 ¹

4.3.1.1 PROPOSED ACTION

The Proposed Action will have a beneficial effect on land use at USAG-HI and USAG-Pōhakuloa facilities. The ICRMPs provide procedures and guidance for events in which land use would have the potential to adversely affect cultural resources and ensure that events are coordinated with the CRM

¹ 72 acres is reported in the HQIIS, but other Department of the Army datasets and National Park Service records report different acreages for KMC.

before actions are taken. The ICRMPs require the Cultural Resources Section to coordinate with land managers before undertaking any archaeological activities that might have the potential to negatively affect the land.

The Proposed Action would have a beneficial impact on USAG-HI and USAG-Pōhakuloa missions during the planning period. Implementation of both ICRMPs would help complete the mission by maintaining Garrison sub-installation compliance with DoDI 4715.16 and AR 200-1. A planning objective of the ICRMPs is to conduct archaeological inventory surveys in areas not adequately surveyed to support training and other projects for the mission. Military training can involve excavations, earth-moving activities, detonation of ordnances, and wildland fire operations, all of which can have a severe impact to the surface and subsurface archaeological record. If during these activities a previously unidentified archaeological resource is found, regulations require that the activity must cease and the CRM has to be notified. Implementation of the ICRMPs would reduce this risk by recommending priority areas for survey and organizing the process for conducting surveys to identify archaeological resources, or areas with high potential for resources, that could be avoided for certain training exercises. Furthermore, the ICRMPs establish standard operating procedures to follow in the event of an inadvertent or unanticipated discovery. ICRMPs are also a mechanism for enhanced education and coordination with military units and other project proponents.

4.3.1.2 NO ACTION ALTERNATIVE

The No Action Alternative would continue with existing management practices. USAG-HI and USAG-Pōhakuloa Cultural Resources Sections currently conduct inventories and evaluations of cultural resources and provide coordination and education between management units. The ICRMPs improve upon these processes by organizing and prioritizing survey, coordination, and educational needs.

Without a coherent and efficient process for coordination between management units, there is an increased risk for inadvertent discoveries and/or damage to cultural resources during training exercises. Interruptions to training and the mission could occur, resulting in a potential lack of troop readiness and negatively impacting the military mission.

4.3.2 AIR QUALITY

According to the Hawai'i Department of Health, Hawai'i enjoys some of the best air quality in the nation. Hawai'i complies with the National Ambient Air Quality Standards, set by the Environmental Protection Agency (EPA) to protect health and welfare from harmful effects of certain commonly occurring pollutants including: carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, sulfur dioxide, and hydrogen sulfide (EPA 2016). Areas are either designated as "attainment" for meeting the ground-level ozone standards or "nonattainment" for not meeting ground-level ozone standards (EPA 2016).

A negative impact to air quality would be any increase in commonly occurring pollutants that would cause adverse effects to human health and welfare and have the potential for an area to be designated as "nonattainment."

USAG-HI

A report created by the EPA's NEPAassist program, January 2017, shows that the entire island of O'ahu is in attainment.

USAG-Pōhakuloa

A report created by the EPA's NEPAassist program, January 2017, shows that the entire island of Hawai'i is in attainment. On the island of Hawai'i, sulfate volcanic emissions reacting with oxygen and moisture in the presence of sunlight form a type of air pollution called "vog," which can temporarily impact island residents. Vog concentrations are dependent on the amount of volcanic emissions, the distance away from the source vents, and the wind speed and direction, and can change drastically on any given day (Hawai'i DOH 2016).

4.3.2.1 PROPOSED ACTION

Implementation of the ICRMPs would not have a regional or statewide impact on air quality. Archaeological surveys and routine maintenance activities conducted during the ICRMPs' planning periods could have the potential to release fugitive dust particles and emissions resulting in negligible short-term effects, but would not foreseeably cause adverse effects to human health and welfare, nor cause any area within an installation to be in "nonattainment."

4.3.2.2 NO ACTION ALTERNATIVE

Air quality would remain in its current condition, in attainment, under the No Action Alternative.

4.3.3 SOILS

The soils of Hawai'i are reflective of the volcanic history of the state, but can vary drastically between islands. Ten soil orders are represented on the Hawaiian Islands (Deenik and McClellan 2007). Rainfall and the amount of time the surface is exposed to weathering play a large role in the soil type of a particular area.

Negative impacts can come in the form of soil compaction, loss of soil structure, soil degradation (e.g., decline in soil quality), and erosion.

USAG-HI

There are seven soil associations on O'ahu which reflect the volcanic history of the area (INRMP-O'ahu 2010). In the mountainous areas and low slopes of the Wai'anae Range, Mahana, Kolekole, Hālawa, Helemano, Kemoo, Kawaihāpai, and Alaka'i soil types can be found (INRMP-O'ahu 2010).

Soil erosion can be locally significant and considered severe in areas where natural drainages and gulches occur (INRMP-O'ahu 2010). Due to the high shrink-swell potential of soils, erosion can be significant where slopes are steep (INRMP-O'ahu 2010). Exposed lava, dry climate, and lack of permanent streambeds may play a role in reducing erosion (INRMP-O'ahu 2010).

USAG-Pōhakuloa

Approximately 80% of PTA is covered by *pāhoehoe* lava, *a'a* lava, and miscellaneous land types (e.g., *pu'us*) (INRMP-Pōhakuloa 2010). Soils are poorly developed and soil erosion is less of an issue on the island of Hawai'i as compared to O'ahu due to the limited amount of soil present. The exception is the northern tier of training areas and northern and western portion of the installation where deep soils can be found (INRMP-Pōhakuloa 2010).

Water erosion on PTA is generally low due to gentle slopes, low soil erosion potential, and low intensity, gentle rainfalls (INRMP-Pōhakuloa 2010). Areas where soils are well-developed have greater potential for soil erosion caused by water and wind (INRMP-Pōhakuloa 2010). Due to inadequate drainage, significant erosion occurs next to roadways (INRMP-Pōhakuloa 2010).

4.3.3.1 PROPOSED ACTION

Implementing the ICRMPs would not result in soil degradation or loss of soil structure. Archaeological surveys and routine maintenance could result in small-scale disturbances to soil, but effects would be negligible and easily remediated if necessary.

4.3.3.2 NO ACTION ALTERNATIVE

Under the No Action Alternative, soil resources would remain unchanged. Archaeological surveys and routine maintenance are ongoing, and the risk for small-scale disturbances to soil exists.

4.3.4 WATER RESOURCES

Water resources can include, but are not limited to, streams, wetlands, lakes, ponds, ocean, and groundwater. Negative impacts to water resources can come in the form of increased sediment and nutrients, changes in temperature, and/or decrease in water quality.

USAG-HI

High level water bodies and basal water bodies are the main sources of groundwater on O'ahu (INRMP-O'ahu 2010) Basal water bodies are created from fresh water derived from infiltration of rainfall, typically from 0 to 40 feet elevation (INRMP-O'ahu 2010). High level water bodies are created from the impounding and accumulation of water in dikes with low permeability (INRMP- O'ahu 2010). The Schofield High Level Water Body, located west of the Wai'anae Mountains, is the major water source for O'ahu installations (INRMP-O'ahu 2010).

The Waikōloa Gulch and the Waikele Stream serve as the primary drainages for SBMR (INRMP-O'ahu 2010). Along the northeast boundary of SBMR flows the North Fork of the Kaukonahua Stream, along with two tributaries (INRM-O'ahu 2010). Many streams on SBMR are intermittent, meaning they typically only flow during the wet season and remain dry during the dry season. All streams on SBMR flow into the Pacific Ocean at Waialua, except for the Waikele, which flows into Pearl Harbor from the north (INRMP-O'ahu 2010). Plants and animals are sustained by rainfall, fog drip, and occasional frost (INRMP-O'ahu 2010).

USAG-Pōhakuloa

Pōhakuloa training lands do not have any surface streams, lakes, or other bodies of water (INRMP-Pōhakuloa 2010). Intermittent stream channels dry quickly after rainfall (INRMP-Pōhakuloa 2010). Rainfall and other water typically leave the site through crevices in the lava to subterranean areas (INRMP-Pōhakuloa 2010).

4.3.4.1 PROPOSED ACTION

The Proposed Action will have a beneficial effect on water resources on USAG-HI and USAG-Pōhakuloa managed lands. The planning objectives for both ICRMPs are to improve coordination between proponents and CRMs and encourage the use of the DPW GIS for more reliable exchange of planning information among programs. Reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of water resources, including intermittent streams, and will ensure that measures are taken to avoid adverse effects to water resources.

4.3.4.2 NO ACTION ALTERNATIVE

Existing water management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk of negative impacts to water resources.

4.3.5 NATIVE ECOSYSTEMS AND BIOLOGICAL DIVERSITY

The Hawaiian Islands support some form of native ecosystems, but more than half of the land is overrun by non-native species. Non-native species can alter the characteristics of native ecosystems and are potential threats to its natural integrity. Cultivation, landscaping, human encroachment, and habitat destruction are all actions that have contributed to the replacement of native ecosystems by non-native-dominated communities.

Biological diversity is defined as the number and variety of species found within a specified geographic region. Hawai'i is one of the most diverse archipelagic regions on earth and has a wide variety of habitats and microclimates in which species can flourish. The Hawaiian Islands are home to a large number of native species, which are an important part of Hawaiian culture.

Past and present military activities have affected native ecosystems and biological diversity through the increase of non-native plant species and habitat destruction. The DoD acknowledged this impact and has implemented an ecosystem-based management approach with the goals of maintaining and improving native ecosystems and the biological diversity of terrestrial and aquatic ecosystems (DoDI 4715.3).

Biological diversity can be affected and potentially limited by the availability of water, nutrients, and space through habitat destruction and the introduction of non-native species

USAG-HI

The 19 Army sub-installations on O'ahu are host to a wide variety of ecological zones, defined by elevation, topography and prevailing ecological conditions and their associated flora and fauna. The sub-installations are a combination of communities classified as native and non-native vegetation, lowland dry, upland shrub, lowland mesic, montane wet, mixed bog, mixed fern/shrub, aquatic natural, and forested.

USAG-Pōhakuloa

The sub-installations on the island of Hawai'i host specialized habitats. PTA is a volcanic desert in the lee of Mauna Kea with many cave and lava tube formations. Kawaihae Military Reservation is on the leeward coast of the Hawai'i Island and is characterized as a marine environment. KMC is in close proximity to and on the leeward side of the volcano and therefore is subject to vog.

In 2013, a vegetation map was created for PTA following the United States National Vegetation Classification System. This mapping effort classified PTA as having 12 vegetation alliances and is dominated by shrubland and woodland land cover types (Block et. al 2013). There are over 30 plant communities, with ~ 300 plant species, identified on PTA (INRMP-Pōhakuloa, 2010). The oldest and most complex of these communities are found in the *kīpukas* (INRMP-Pōhakuloa 2010). These communities range from little to no plant cover, mostly due to lava flows, to species-rich communities (INRMP-Pōhakuloa 2010).

4.3.5.1 PROPOSED ACTION

Implementing the ICRMPs will have a beneficial effect on native ecosystems and biological diversity. The planning objectives for both ICRMPs are to improve coordination between proponents and CRMs and encourage the use of the DPW GIS for more reliable exchange of planning information among programs. Reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of sensitive ecosystems and resources and will ensure that measures are taken to avoid adverse effects to native ecosystems and biological diversity. Improved coordination provides the Natural Resources Program an opportunity to advise on best management practices to avoid negative impacts to these sensitive resources.

4.3.5.2 NO ACTION ALTERNATIVE

Existing ecosystem management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk for negative impacts on native ecosystems and biological diversity.

4.3.6 THREATENED AND ENDANGERED SPECIES

The Garrison's Natural Resources Program is responsible for managing over 100 of the 400 federally listed threatened and endangered species and their critical habitat in Hawai'i (USAG-HI NRP n.d.). The species managed by the Natural Resources Program represent some of the planet's rarest

species, and a majority can only be found on the Hawaiian Islands (USAG-HI NRP n.d.). Some species may be restricted to a single island, and, in some instances, restricted to certain mountain ranges, and many can only be found on Garrison-managed Army lands on the Hawaiian Islands (USAG-HI NRP n.d.). The Natural Resources Program applies an ecosystem-based approach to manage its training lands to restore and protect species and their habitats (USAG-HI NRP n.d.).

The Garrison's Natural Resources Program has developed "implementation teams" that consist of expert biologists from conservation agencies and landowners in Hawai'i to help manage the high number of endangered species on and around Army lands (USAG-HI NRP n.d.). Together, the implementation teams develop implementation plans that describe the actions necessary to stabilize the Army's threatened and endangered species and their habitats (USAG-HI NRP n.d.). By achieving species and habitat stabilization, the Garrison can effectively move species from existing in a state of jeopardy to a state of stability (USAG-HI NRP n.d.).

The Hawai'i Biodiversity and Mapping Program (formerly known as the Hawai'i Natural Heritage Program) maintains a comprehensive database and distribution records of Hawai'i's sensitive species, including those found on Garrison training lands.

USAG-HI

The Nature Conservancy (TNC) of Hawai'i and the Hawai'i Biodiversity and Mapping Program have classified the impact area west of Schofield Barracks, high in the Wai'anae Mountains, as having "extraordinary biological significance" (R.M. Towill Corp. 1997, as cited in INRMP-O'ahu 2010). USAG-HI has documented 114 listed species and 12 proposed endangered species on O'ahu training lands (INRMP-O'ahu 2010). Only one federally listed bird species, O'ahu 'elepaio (*Chasiempis sandwichensis ibidis*), has USFWS designated critical habitat on Schofield Barracks Military Reservation (INRMP-O'ahu 2010).

USAG-Pōhakuloa

Since 1997, Pōhakuloa has conducted annual surveys and monitors for the presence of federally listed species (USAG-HI 2007). Personal communication with USAG-Pōhakuloa staff verifies that annual threatened and endangered species reports are created every year with up-to-date surveys (J. Taomia, personal communication, 21 February 2017 and Lena Schnell, personal communication, 02 June, 2017). To date, these studies have identified 25 endangered, one threatened, and six proposed endangered species on USAG-Pōhakuloa training lands.

4.3.6.1 PROPOSED ACTION

Implementation of the ICRMPs will have a beneficial effect on threatened and endangered species. Archaeological inventory surveys, evaluation of buildings that are 50 years or older, and routine maintenance could occur under the direction of the ICRMPs. These activities may involve localized ground disturbances with the potential to affect threatened and endangered species. However, the ICRMPs streamline the coordination process that occurs between the Cultural Resources Sections and the Natural Resources Program to identify areas where threatened and endangered species exist

and avoid negative effects. Improved coordination would also ensure that the requirements of a Biological Opinion² are adhered to during cultural resources management activities.

4.3.6.2 NO ACTION ALTERNATIVE

Existing threatened and endangered species management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk of adverse impacts to sensitive species.

4.3.7 INVASIVE SPECIES

Invasive species are characterized as species that can outcompete native species for light, space, nutrients, and/or water and require control or eradication. Invasive species can directly or indirectly affect native species by modifying or replacing individual species and/or native ecosystems and interfere with the military mission. Invasive species management is a top priority for the DoD to mitigate adverse impacts from authorized military readiness activities on DoD lands and to minimize the economic, ecologic, and human health impacts that invasive species may cause (EO 13751). Military installations are required to monitor invasive species populations, track the presence over time to determine when control measures are necessary, and to evaluate the effectiveness of prevention, control/eradication, and restoration measures (EO 13751).

USAG-HI and USAG-Pōhakuloa

Numerous invasive plants, mammals, birds, fish, terrestrial and aquatic invertebrates, and herpetofauna occur on USAG-HI and USAG-Pōhakuloa managed lands (INRMP-O'ahu 2010). The invasive species program for each sub-installation spends a considerable amount of time and resources to detect and manage invasive species to reduce negative impacts to sensitive species, the environment, and training operations.

4.3.7.1 PROPOSED ACTION

ICRMP implementation will have a beneficial effect on the management of invasive species. Archaeological surveys and routine maintenance activities have the potential to spread invasive species through the removal of native vegetation and by localized ground disturbance. However, fully implemented management plans can help reduce the chance of invasive species spread from cultural resources activities by improving coordination between the management units. Coordinating activities will allow the Natural Resources staff to identify weedy species in action area, offer advice on how to reduce potential spread, monitor for infestations, and implement control/eradication measures in the event an invasion occurs.

² A Biological Opinion is prepared by the United States Fish and Wildlife Service stating whether a project or proposed activity is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (USFWS 2017).

4.3.7.2 NO ACTION ALTERNATIVE

Invasive species management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk of invasions as directed by Executive Order 13751.

4.3.8 CULTURAL RESOURCES

Cultural resources laws place different responsibilities upon the Garrison with respect to each type of resource. Cultural resources can include historic buildings, sites, structures, and objects, historic districts, archaeological resources, sacred sites, archaeological collections and associated records, and cultural items.

Historic properties, as established by the NHPA, are any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion, in the NRHP (36 CFR 800.16(l)(1)).

Archeological resources, as defined by the ARPA, include “any material remains of past human life or activities which are of archaeological interest over 100 years old and found in an archaeological context on federal or Indian lands. Federal permits are required to excavate archaeological resources.”

Sacred sites are any specific, discrete, narrowly delineated location of federal land that is identified by an Indian tribe or tribal representative as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the federal agency was notified of its existence by a tribe or authoritative representative of an Indian religion (EO 13007). Executive Order 13007, *Indian Sacred Sites*, requires executive agencies with administrative responsibility of federal land management to accommodate access to and ceremonial use of Indian sacred sites and avoid adversely affecting the physical integrity of sacred sites. This EO does not apply directly to Native Hawaiian organizations, but the spirit of the EO should guide the Garrison in its management.

The NHPA authorizes the Secretary of Interior to promulgate regulations for the proper curation of archaeological collections created under NHPA, the Reservoir Salvage Act, the Antiquities Act, and ARPA (36 CFR §79). Collections and associated records include the curation of federally owned and administered archaeological collections, including collections of material remains such as artifacts, objects, specimens and other physical evidence, that are excavated or removed during a survey, excavation, or other study of a prehistoric or historic resource (36 CFR §79).

Cultural items as defined in 25 U.S.C. 3001 Section 3 (NAGPRA) include human remains, associated funerary objects, unassociated funerary objects, sacred objects, and items of cultural patrimony.

4.3.8.1 CULTURAL RESOURCES INVENTORY

USAG-HI

The following historic buildings, structures, districts, landmarks, archaeological sites, collections, and cultural items are managed by USAG-HI.

Āliamanu Military Reservation (AMR): A *heiau* and burial terrace known as “Salt Lake Heiau” or as “Pu’u Kapu Heiau” is the only known archaeological site at AMR. Subsequent archaeological surveys have discovered no other tangible archaeological sites (McAllister 1933; Takemoto and Joerger 1975; Kamakau 1964; as cited in ICRMP-USAH-HI 2017).

AMR has 119 buildings and structures that are 50+ years old that are in need of evaluation (RPLANS 2016). The underground tunnels and bunkers are also in need of evaluation within the context of other underground military structures.

Dillingham Military Reservation (DMR): Identified archaeological sites at DMR consist of abandoned concrete buildings, a manhole, a terrace complex, a *heiau* structure, and an agricultural complex (McAllister 1933; Takemoto and Joerger 1975; Rosendahl 1977; Moblo 1991; McGerty and Spear 2001; Kamakau 1964; Handy 1940; McGerty and Spear 1997; McGerty & Spear 2009; McGerty & O'Rourke 2010; as cited in ICRMP-USAH-HI 2017). Two sites determined to be eligible for listing include the Kawailoa *heiau* and the Kealia-Kawaihapai Complex. Thirteen sites are determined to be not eligible for listing, with the remaining 22 sites yet to be evaluated.

DMR has six buildings and structures over 50+ years old that are listed in the NRHP (RPLANS 2016).

Field Station Kunia (FSK): A 1998 reconnaissance survey by the Naval Facilities Engineering Command found no evidence of significant archaeological resources. Any potential sites would have been disturbed from previous construction and pineapple cultivation activities (Department of the Navy 1998, as cited in ICRMP-USAH-HI 2017).

FSK contains six buildings and structures that are over 50+ years old. Only one facility is determined eligible for listing (RPLANS 2016). Other FSK facilities were evaluated and determined to be not eligible for listing (U.S. Army Environmental Command 2013) (Department of the Navy 1998, as cited in ICRMP-USAH-HI 2017).

Fort DeRussy Military Reservation (FDR): Identified archaeological sites at FDR include royal fishponds, *auwai* (canal) complex, and burial sites (Elmore and Kennedy 2002; as cited in ICRMP-USAH-HI 2017). Of the known sites, one is determined eligible for listing, four sites are not eligible for listing, and nine sites have yet to be evaluated.

FDR contains three buildings and structures that are 50+ years old requiring evaluation (RPLANS 2016). Battery Randolph is individually listed on the NRHP, along with six other Batteries, as part of the Artillery District of Honolulu Multiple Property.

An Archaeological Collection Summary for Fort DeRussy, Hawai'i was completed in 1996 (USACE 1996a). According to the report, an inadvertent discovery of human remains of six individuals was reported in 1976 during a construction project and the remains were reburied on Fort DeRussy (Davis 1992:18; Rosendahl 1977:1-24, 11-10; as cited in ICRMP-USAH-HI 2017). Human remains of two individuals were also discovered in 1991 and 1992 and left in situ. In 1993, during archaeological monitoring of subsurface utility excavations, between 39 and 52 individuals were discovered

(Carlson et al. 1995:29,40,42,45,4748; Davis 1992:18,44; Rosendahl 1977:1-24,11-10; Simons et al. 1995:48; as cited in ICRMP-USAH-HI 2017); 11 remains were left in situ, one was reinterred on site, and the rest were “exhumed and reinterred in a crypt on Fort DeRussy” (USACE 1996a).

Fort Shafter Military Reservation (FSMR): FSMR contains archaeological sites from both traditional Hawaiian context and the historic era. These include rock shelters, Hawaiian fishponds (now buried under fill), *heiau* structures, a pack trail, and several military sites (Tomonari-Tuggle and Slocumb 2000, as cited in ICRMP-USAH-HI 2017). Of these sites, one is determined not eligible, with 29 sites in need of evaluation.

FSMR has two historic districts and several prominent historic buildings and structures. One hundred thirteen of the buildings and structures have an active historic status (listed, eligible, or contributing to an eligible district), eight are determined not eligible, and 85 buildings are 50+ years old and in need of evaluation (RPLANS 2016).

An Archaeological Collection Summary for Fort Shafter, Hawai'i was completed in 1996 (USACE 1996b). According to the report, the remains of one human skeleton was discovered at Fort Shafter in 1983 and released to the Bishop Museum. No objects are known to be associated with these human remains. The summary notes that "The military reservation (Fort Shafter) was a burial ground extending as far as Pohaha and up inland to the home of one of the sons of the Honorable S.M. Damon..." (Sterling and Summers 1978:327; Rosendahl 1977:1-49; as cited in ICRMP-USAH-HI 2017). The summary also notes the potential for disguised burial caves in steel rocky faces of the more inland portions of gulches at Fort Shafter. It was a common native Hawaiian internment practice to place remains in lava tubes, rock shelters, or niches in steep cliffs. These could be either individual or group burials (Kirch 1985:238; as cited in ICRMP-USAH-HI 2017)" (USACE 1996b). FSMR also has one reburial crypt where the Garrison reinterred human remains recovered from disturbed rock shelter sites within Fort Shafter.

Helemano Military Reservation (HMR): HMR was extensively developed during WWII and the postwar years, and subsequent archaeological surveys did not result in any identified sites (Rosendahl 1977; Fankhauser 1987; Cox and Zulick 2001; as cited in ICRMP-USAH-HI 2017).

HMR has one building considered eligible for the purposes of a Program Comment and six buildings over 50 years old in need of evaluation (RPLANS 2016).

Kahuku Training Area (KTA): Identified archaeological sites at KTA include cooking hearths, habitations, an agricultural complex, and an upland garden. Several archaeological sites are also of post-contact and military origin, including a historic house site, irrigation features, bunkers, and concrete slabs (Burke, de Leeuw, and Hammatt 2013, Monahan 2009, Descantes, Orr, and Desilets 2009, Ogg, Farrell, and Dega 2012, Hawkins, Toney, and Wasson 2014, Patolo, Farrell, and Dega 2010, McGerty and Spear 2004, Robins 2012; as cited in ICRMP-USAH-HI 2017). Of these sites, one Hanakoa Platform, is NRHP-listed, 24 are determined eligible, 35 sites are determined not eligible for listing, and the remaining 122 are yet to be evaluated.

KTA includes several buildings and structures that are associated with WWII and Cold War eras. In total, KTA includes 23 facilities over 50+ years old; 19 of which are contributing elements of an eligible historic district, and three of which are individually eligible for the NRHP (RPLANS 2016). One building has not yet been evaluated.

Kawailoa Training Area (KLOA): Identified archaeological sites include agricultural terraces, rock shelters, habitation complexes, enclosures, pondfield systems, burial areas, and hearths (Rosendahl 1977; Kirch and Sahlins 1992; Anderson 1998; Cox and Zulick 2001; as cited USAG-Hawai'i ICRMP 2017). Of the known sites, five are eligible, two are determined not eligible for listing, and the remaining 72 are yet to be evaluated.

There are no buildings or structures in the RPLANS real property database that are 50+ years old.

Kīpapa Ammunition Storage Site (KAS): There are five known historic-era archaeological sites at KAS, all of which are yet to be evaluated. There are no known prehistoric-era archaeological sites for either the upper or lower Kīpapa Gulch areas.

In total, KAS has 70 buildings and structures over 50 years old in the RPLANS real property database; 68 of these are ammunition storage or air raid/fallout shelter with active historic status (listed, eligible, or contributing to an eligible district). There are an additional 2 air raid/fallout shelters not yet evaluated.

The KAS is a regional ammunition storage facility, largely unused today with the exception of one magazine in the Lower Kīpapa group utilized by the National Oceanic and Atmospheric Administration (NOAA) as a tsunami and earthquake detection station (Pacific Cooperative Studies Unit 2010).

Mākua Military Reservation (MMR): Identified archaeological sites at MMR include *heiau* platforms, agricultural terraces, walls, enclosures, mounds, hearths (*imu*), habitation complexes, paths, and trails (Anderson 1998; Cox and Zulick 2001; Williams 2004; as cited USAG-Hawai'i ICRMP 2017)(Kay et al. 2013:133). Of the known sites, 33 were determined to be ineligible for listing. One site, Ukanipō *heiau*, is listed on the NRHP, 12 are determined eligible for listing, and the remaining 72 sites have yet to be evaluated.

MMR includes one structure over 50+ years old in need of evaluation (RPLANS 2016).

Mauna Kapu Communication Station Site (MKS): MKS contains no identified archaeological sites.

MKS has two buildings over 50+ years old in need of evaluation (RPLANS 2016).

Mokulē'ia Army Beach (MAB): MAB is largely undeveloped and there are no identified archaeological sites (Rosendahl 1977, as cited USAG-Hawai'i ICRMP 2017).

Pililā'au Army Recreation Center (PARC): Pililā'au Army Recreation Center (PARC) is located within Waianae-Kai Military Reservation (WMR). WMR is the official real property site name in which

the PARC is located. For archaeological purposes, WMR is considered a single site and has been assigned State Inventory of Historic Properties by the State of Hawai'i. The site is a highly significant pre-contact and post-contact Native Hawaiian cemetery. Excavations have yielded Native Hawaiian human remains in at least two different areas of the installation. A series of impressive petroglyphs carved into the rocks on the seaward side of the sea wall were exposed and documented in 2016.

The site contains five historic buildings that are 50+ years old (RPLANS 2016).

An Archaeological Collection Summary for Waianae Army Recreation Center, Hawai'i was completed in 1996 (USACE 1996c). According to the report, human remains of at least 33 individuals and thousands of associated funerary objects were recovered at the installation between 1984 and 1990, all of which were reportedly reinterred at the installation. Some were reinterred with their associated funerary objects, but some funerary objects may remain part of collections at other repositories.

Pūpūkea-Pa'ala'a-Uka Military Road (Drum Road): Twenty-three sites were identified in a 2002 survey conducted by Pacific Legacy, Inc. and are in need of an evaluation. Five are traditional Hawaiian in age, and the remaining sites consist largely of military-related development and use of the road. A single metal cross, presumably marking a grave, was also recorded (Whitehead, Cleghorn, and McIntosh 2005, as cited USAG-Hawai'i ICRMP 2017).

There are no buildings or structures that are 50+ years old.

Schofield Barracks Military Reservation (SBMR): As a whole, SBMR contains a total of 134 identified archaeological sites yet to be evaluated. The majority of identified sites are of Native Hawaiian origin and include heiau structures, agricultural terraces, 'auwai, mounds, enclosures, stone alignments, irrigation complexes, pondfields, and roads. SBMR also contains several historic era sites, including concrete foundations, tunnels/bunkers, and a reservoir.

Schofield Barracks Military Reservation as a whole, including cantonment, east (SBER), west (SBWR), and south ranges (SBSR), has 280 buildings and structures with an active historic status (listed, eligible, or contributing to an eligible district) and 5 are determined to be non-contributing elements or not eligible for listing. There are 172 buildings and structures over 50 years of age yet to be evaluated (RPLANS 2016).

Schofield Barracks Cantonment: Previous studies unanimously concluded that more than a century of intensive impacts by military land use, urban development, and commercial agriculture have substantially altered the cultural landscape of the central plateau's tablelands and thus, most, if not all, evidence of traditional cultural activity has been eliminated (Robins, Roberts, and Gilda 2007; Desilets et al. 2011; as cited USAG-Hawai'i ICRMP 2017) (Tetra Tech 2015). There are 10 sites in the cantonment that have yet to be evaluated (Belt Collins 2000a; Roberts, Robins, and Buffum 2004; as cited USAG-Hawai'i ICRMP 2017).

Schofield Barracks East Range (SBER): SBER has 13 known archaeological sites yet to be evaluated, including a terrace with aligned stones, a pecked boulder, and the O‘ahu *nui* stone; as well as historic-era sites, including concrete foundations, a tunnel/bunker, and reservoir (Robins and Spear 1997; as cited USAG-Hawai‘i ICRMP 2017).

Schofield Barracks South Range (SBSR): The majority of identified archaeological sites at SBSR are of Native Hawaiian origin and include agricultural terraces, *‘auwai*, mounds, enclosures, stone alignments, irrigation complexes, pondfields, and roads (Robins and Spear 1997; Anderson 1998; Kaschko et al. 2011; as cited USAG-Hawai‘i ICRMP 2017) (USAEC 2008). Sixty-two sites are in need of evaluation.

Schofield Barracks West Range (SBWR): Most of the known archaeological sites at SBWR and the Battle Area Complex are of Native Hawaiian origin and include *heiau* structures, agricultural terraces, *‘auwai*, fishponds, enclosures, stone alignments and roads (Anderson 1998; Buffum and Peterson 2005; Buffum, Robins, González; and Peterson 2005; DeBaker and Peterson 2009; Robins and Spear 1997; Sims and Hawkins 2014; Kaschko and Tome 2011; Winburn, Byerly, and Mark 2013; as cited USAG-Hawai‘i ICRMP 2017) (USAEC 2008). Forty-nine sites are in need of evaluation.

Signal Cable Trunking System: There are no known archaeological sites on Signal Cable Trunking System lands.

The Signal Cable Trunking System includes 6 communications centers that were preexisting at the time of construction: 30 centers constructed in 1941, and 6 centers added during the Cold War between 1956 and 1989, all of which are yet to be evaluated. The system also includes 17 cable vaults built in 1941 and more than 1,100 miles of cable, all of which still need to be evaluated (RPLANS, 2016)

Tripler Army Medical Center (TAMC): A relatively large portion of TAMC has received archaeological survey coverage. Known archaeological resources include a temporary shelter, an agricultural terrace, and possibly a *heiau* and are in need of evaluation (Rosendahl 1977; Hammatt and Chiogioji 1994; Zulick and Cox 2000; as cited USAG-Hawai‘i ICRMP 2017).

TAMC contains 42 buildings and structures that are 50+ years old. Twenty-five facilities are reported as contributing elements of an eligible Historic District, four facilities reported as non-contributing, and thirteen buildings and structures over 50 years old yet to be evaluated. The family housing under management by Island Palm Communities, LLC are not eligible according to the Programmatic Agreement for the Residential Communities Initiative (RPLANS 2016).

Waikakalaua Ammunition Storage Tunnels (WAST): No archaeological sites are documented for the Waikakalaua Ammo Storage Tunnels site.

The storage site originally supported 52 WWII-era tunnels built into the canyon walls of the Waikakalaua Gulch; 49 of these air raid/fallout shelters remain, 48 of which have an active historic

status (listed, eligible, or contributing to an eligible district), and 1 of which is not yet evaluated (USAEC 2013, RPLANS 2016).

Wheeler Army Airfield (WAAF): A majority of the identified archaeological sites at WAAF are affiliated with the historic era. Eleven sites are in need of evaluation. Potentially eligible sites include the O'ahu Rail and Land Company (OR&L Co.) rail line trestle and the Maunauna Site in the southwestern bluff of Wai'eli Gulch (Rosendahl 1977; Belt Collins 2000b,a; Buffum et al. 2004; as cited USAG-Hawai'i ICRMP 2017). Subsequent surveys found no evidence of traditional Hawaiian or early historic cultural resources.

WAA contains 294 buildings and structures over 50 years old. Two hundred and seven of the buildings and structures have an active historic status (listed, eligible, or contributing to an eligible district), 7 were determined to be noncontributing elements of a historic district, and 80 are yet to be evaluated (RPLANS 2016).

USAG-Pōhakuloa

The following historic buildings, structures, districts, archaeological sites, collections, and cultural items are managed by USAG-Pōhakuloa.

Kawaihae Military Reservation: Kawaihae Military Reservation consists of landfill area; therefore, archaeological sites are not anticipated. In 2001, these findings were confirmed by archaeologists, Cox and Zulick, who asserted that no archaeological remains were located within Kawaihae Military Reservation bounds (Rosendahl 1977; Cox and Zulick 2001; as cited USAG- Pōhakuloa ICRMP 2017).

Most structures on Kawaihae Military Reservation were built between 1959-1985 and consist of wharves, sea walls, offshore moors, and a dock/ramp (Cox and Zulick 2001). Six buildings and structures require evaluation to determine NRHP eligibility.

Kīlauea Military Camp (KMC): No subsurface cultural deposits have been located on KMC. Clearance surveys for the Hawai'i Volcanoes National Park identified five isolated historic period remains (including a stone walkway, an earth mound, a stone path, an L-shaped stone foundation, and a disturbed cement foundation); none were determined to be eligible for listing (Tomonari-Tuggle and Slocumb 2000).

Kīlauea Military Camp (KMC) is a Historic District determined eligible for listing on the NRHP for its association with the development of a recreation camp for U.S. military personnel on the Island of Hawai'i. According to National Park Service records, the Hawai'i SHPD concurred with the National Park Service's determination that Kīlauea Military Camp is eligible for listing on the NRHP in 1996 (National Park Service 2006). The camp is also considered locally significant for its Plantation-style architecture using local materials and adaptation of National Park Service rustic and naturalistic design. According to a 2017 letter from the Superintendent at Hawai'i Volcanoes National Park, there are 103 contributing elements and 42 non-contributing elements within the eligible Historic District,

with two remaining buildings and structures yet to be evaluated (Orlando 2017, as cited USAG-Pōhakuloa ICRMP 2017).³

Pōhakuloa Training Area (PTA): To date, approximately 20% of the impact area and 50% of the area outside the PTA High Hazard Impact Area have been surveyed for cultural resources. Surveys inside of the impact area are conducted as areas are reclaimed for ranges and other training infrastructure. The remaining unsurveyed areas outside of the impact area are primarily in remote areas that are not used for training.

As of Sept. 30, 2016, PTA contains 1,198 known archaeological sites. Thirty-nine sites have been determined eligible for the NRHP. Of the eligible sites, 5 are related to 19th and 20th century contexts, 32 are Traditional Hawaiian sites, 1 is protohistoric, and the period of significance for the one remaining site is not yet identified. Known archaeological sites at PTA represent a diverse range of Native Hawaiian site types, including caves, enclosures, lithic scatters, C-shaped shelters, shrines, platforms, and trails (USAG ICRMP-Pōhakuloa 2017). One site, the Bobcat Trail Habitation Cave, is listed on the National Register, 326 sites have been determined not eligible, and 822 are unevaluated. Of the unevaluated sites, 89 are 19th or 20th century sites, 364 are traditional Hawaiian sites, two span the traditional Hawaiian and historic era contexts, two are recent, and a period of significance has not been identified for 365.

No archaeological sites have been identified in the PTA cantonment or at Bradshaw Army Airfield. Portions of both areas have been surveyed, and subsurface monitoring in both areas has failed to identify any stratified archaeological deposits.

To date, no historic buildings at PTA are determined eligible for the NRHP. Most of the buildings on PTA are Quonset huts dating from 1955-1958. In 2006, the ACHP published a Program Comment for the Department of Defense regarding Cold War Era Unaccompanied Personnel Housing (UPH), and the Army in turn published a historic context on *Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989)* as mitigation for any adverse effects to properties identified under the ACHP Program Comment. Seventy-eight of the buildings at PTA and one building at Bradshaw Army Airfield are considered Cold War-era UPH in accordance with ACHP Program Comment and thus are not subject to further NHPA consultation or mitigation. A consultation is underway with the SHPD for the remaining buildings.

An Archaeological Collection Summary for PTA was completed in 1996 (USACE 1996). USAG-Pōhakuloa identified and repatriated those human remains and cultural items that were within the Garrison's collections described in the 1996 summary. In some cases, human remains, or *iwi kupuna*, were re-interred as an appropriate disposition, in compliance with NAGPRA, and are of high cultural

³ Note: NPS claims 103 contributing resources, 42 non-contributing, and 2 "undetermined" within the KMC district. These numbers do not match Army real property records that show 79 contributing or eligible, 42 non-contributing, and 2 yet to be evaluated.

and traditional religious value. Therefore, locational information is restricted in accordance with the commitments made during consultation for those actions.

4.3.8.2 SACRED SITES

As of June 2017, no sacred sites have been designated at any of the Army installations managed by USAG-HI and USAG-Pōhakuloa.

4.3.8.3 IMPACTS TO CULTURAL RESOURCES

Undertakings that could pose impacts to cultural resources generally involve alterations to a property or the surrounding area, with the most potential for adverse impacts on training lands. Facilities development and improvements, underground and aboveground utilities construction, landscaping and vegetation removal, military training activities, vandalism and looting, and unauthorized excavation of archaeological sites are all potential sources of adverse impacts to cultural resources. For this analysis, an impact will be considered adverse if the impact is significant enough to damage a site's integrity, destroy the research potential of the resource, or prohibit its eligibility for the State Inventory of Historic Properties or the NRHP.

4.3.8.4 PROPOSED ACTION

ICRMP implementation will have a beneficial effect on cultural resources. The goals of both ICRMPs are to consolidate requirements for compliance with NHPA, NEPA, NAGPRA, ARPA and other legal requirements consistent with DoD standards while minimizing effects on the military mission. The ICRMPs provide streamlined direction for routine activities that may have an impact on cultural resources by establishing SOPs, identifying various public consultation requirements, and providing goals that would benefit the management of cultural resources on Garrison lands. As a result of implementation, USAG-HI and USAG-Pōhakuloa will have a concise and well-defined management plan to guide cultural resources identification and management over the next five-year funding cycle (FY2017-FY2021).

4.3.8.5 NO ACTION ALTERNATIVE

Existing management for cultural resources under the No Action Alternative would remain the same. The Cultural Resources Sections comply with applicable legal requirements, actively coordinate their activities with other Garrison management units, and provide education to reduce risk of negative impacts to cultural resources.

4.3.9 AESTHETIC AND VISUAL RESOURCES

Aesthetic and visual resources are defined by the Army as the “components of the environment as perceived through the visual sense only. Aesthetic specifically refers to beauty in both form and appearance” (U.S. Army 2006). Aesthetic and visual resources can include landforms, vegetation, water surfaces, and cultural modifications (physical changes caused by humans) (Lawrence 2007).

Cultural landscapes as defined by National Park Service *Preservation Brief 36: Protecting Cultural Landscapes*, and USACERL *Guidelines for Documenting and Evaluating Historic Military Landscapes* “is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person exhibiting other cultural or aesthetic values” (Birnbaum 1994).

There are numerous aesthetic and visual resources on Garrison-managed lands. Aesthetic and visual resource types include historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.

An impact to an aesthetic and visual resource can be defined as the degree of change in visual resources and viewer response to those resources caused by an action or project.

4.3.9.1 PROPOSED ACTION

ICRMP implementation will have no effect on aesthetic or visual resources. There are no projects or actions under the Proposed Action that would negatively impact aesthetic and visual resources within and around lands managed by USAG-HI or USAG-Pōhakuloa.

4.3.9.2 NO ACTION ALTERNATIVE

The No Action Alternative would maintain existing conditions and existing cultural resources management practices with respect to visual and aesthetic resources.

4.4 Socioeconomics, Protection of Children and Private Property, Environmental Justice

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, protects children from disproportionately incurring environmental health or safety risks that may arise from federal actions. Health and safety risks to children can be attributed to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to) (EO 13045).

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires federal actions to address environmental justice in minority and low-income populations. Environmental justice analyses are performed to identify potentially disproportionately high and adverse impacts to these target populations and to identify alternatives that might mitigate these impacts.

No racial or ethnic group constitutes a majority in Hawai'i. The State of Hawai'i estimates that in 2015 the population of Hawai'i was 1,431,603 people (Hawai'i. Census 2017). Asians make up 37.3%, Caucasians 26.7%, Native Hawaiians and other Pacific Islanders constitute 9.9%, Hispanics 10.4%,

and multi-racial groups make up 23% of the population (Hawai'i. Census 2017). Median household income is \$69,515 with 10.6% of the population living in poverty (Hawai'i. Census 2017).

This analysis considers the region of influence from federal actions to be located solely within the boundaries of USAG-HI and USAG-Pōhakuloa controlled lands. Both ICRMPs provide management direction and guidance for only the cultural resources that are within the installation boundaries.

During the development of the ICRMPs, Native Hawaiian organizations and groups that were traditionally associated and/or culturally affiliated with each geographic area were contacted to determine if any of the facilities possessed traditional cultural properties of significance to these groups. No traditional cultural properties were identified.

4.4.1.1 PROPOSED ACTION

Implementing both ICRMPs would not result in adverse effects to air quality, water bodies, nor would any hazardous or toxic materials or wastes be released. Therefore, the Proposed Action would not result in environmental or safety risks that would disproportionately affect children, minority, or low income populations. Implementing both ICRMPs provides a beneficial effect by streamlining the consultation process for individuals and groups that might be affected by USAG-HI and USAG-Pōhakuloa actions.

4.4.1.2 NO ACTION ALTERNATIVE

The No Action Alternative would maintain existing practices and abide by existing legal requirements for consulting with Native Hawaiian populations and other minority groups who may be disproportionately affected by actions on Garrison lands.

4.5 Cumulative Effects

The most devastating environmental effects may result, not from the direct effects of a particular action such as implementation of a management plan, but from the combination of individually minor effects of multiple actions over time (NEPA 2017). Baseline environmental conditions provide the context for evaluating impacts and includes all potentially affected resources, ecosystems, and human communities (NEPA 2017).

Implementing the Proposed Action will not contribute to cumulative effects. It will, however, mark the first version of ICRMPs in place at all of the 22 sub-installations directly managed by USAG-HI and USAG-Pōhakuloa. The ICRMPs are guiding documents without site-specific actions; they complement and inform other management plans such as real property master plans, range complex management plans, or natural resource management plans. Due to the nature of the ICRMP as a management and guiding document without any site-specific actions, there is little opportunity to add to the cumulative effects of installation planning.

4.6 Irreversible and Irretrievable Commitment of Resources

An analysis of irreversible and irretrievable commitment of resources is required as part of the NEPA environmental review process. Irreversible and irretrievable commitment of resources refers to the use of non-renewable resources and the effects that their use will have on future generations (42 USC § 4331 Sec. 101 (v)). Irreversible effects may result from the use or destruction of a specific resource, such as fuel, which cannot be replaced within a reasonable time frame. Irretrievable impacts could result from the loss in value of a resource that can no longer be restored as a result of an action.

ICRMP implementation may require negligible commitments of non-renewable resources such as fuel for vehicle use.

CHAPTER 5 CONCLUSION

Table 5-1: Summary of Environmental, Social, and Economic Impacts

Resource Area	Proposed Action	No Action Alternative
Mission, Location, and Land Use	Beneficial Impact: The ICRMPs provide comprehensive guidance for events in which land use and training exercises have the potential to adversely affect cultural resources. Improved coordination can reduce the risk of interruptions to the mission.	Adverse Impact: Increased risk for inadvertent discoveries and/or damage to cultural resources during training exercises that could lead to interruptions in the mission. Mission interruptions could result in a lack of troop readiness.
Air Quality	Negligible Impact: Possible effect from release of fugitive dust during surveys and maintenance that occur with or without an ICRMP. Fugitive dust release would not foreseeably result in adverse effects to human health, nor cause any installation to be classified as “non-attainment.”	Negligible Impact: Air quality designation would remain unchanged, in attainment. Ongoing survey and maintenance activities might result in negligible short-term negative effects from fugitive dust, but would not result in adverse effects to human health.
Soils	Negligible Impact: ICRMP implementation would not result in soil degradation or loss of soil structure. Archaeological surveys and routine maintenance could result in small-scale disturbances to soil, but effects would be negligible and easily remediated if necessary.	Negligible Impact: Soil resources will remain unchanged from current conditions. The potential for small scale disturbances exists during survey and maintenance activities.
Water Resources	Beneficial Impact: Improved coordination and reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of water resources, including intermittent streams, and will ensure that measures are taken to avoid adverse effects to water resources.	No Impact: Existing coordination to reduce risk of negative impacts to water resources would continue.

Resource Area	Proposed Action	No Action Alternative
Native Ecosystems and Biological Diversity	Beneficial Impact: Improved coordination and reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of sensitive ecosystems and resources and will ensure that measures are taken to avoid adverse effects to native ecosystems and biological diversity. Improved coordination provides the Natural Resources Program an opportunity to advise on best management practices to avoid negative impacts to these sensitive resources.	No Impact: Existing coordination to reduce risk of negative impacts to native ecosystems and biological diversity would continue.
Threatened and Endangered Species	Beneficial Impact: Improved coordination for identifying areas where threatened and endangered species exist and could be directly or indirectly affected by a project or activity will further protect sensitive species.	No Impact: Existing coordination procedures would continue to reduce risk of negative impacts to threatened and endangered species.
Invasive Species	Beneficial Impact: Improved coordination will allow the Natural Resources Program to identify weedy species in action area, advise on how to reduce potential spread, monitor for infestations, and implement control/eradication measures in the event an invasion occurs.	No Impact: Existing coordination procedures would continue to reduce risk of the accidental invasion and spread of invasive species.
Cultural Resources	Beneficial Impact: The ICRMPs provide comprehensive and efficient management guidance for routine activities that could negatively impact cultural resources, establishes SOPs, and provides goals to benefit the management of cultural resources.	No Impact: Existing management would remain the same. The Cultural Resources Sections comply with applicable legal requirements, actively coordinate their activities with other Garrison management units, and provide education to reduce risk of negative impacts to cultural resources.

Resource Area	Proposed Action	No Action Alternative
Aesthetic and Visual Resources	No Impact: There are no projects or actions under the Proposed Action that would negatively impact aesthetic and visual resources.	No Impact: The No Action Alternative would maintain existing conditions and existing cultural resource management practices with respect to visual and aesthetic resources.
Socioeconomics, Protection of Children and Private Property, and Environmental Justice	No Impact: ICRMP implementation would not result in adverse effects to air quality, water bodies nor would any hazardous or toxic materials or wastes be released that could disproportionately affect children, native populations, and/or minority groups.	No Impact: Current conditions would remain unchanged. Existing management practices and legal requirements require that consultations are held for Native Hawaiian populations and other minority groups who may be disproportionately affected by actions on Garrison lands.

5.1 Conclusion

The legal requirements of DoDI 4715.6 and AR-200-1 mandate that each Army installation develop and implement an ICRMP for use as a planning tool and as the guiding document for cultural resources management decisions. The ICRMPs articulate management procedures and long-range goals for cultural resources on USAG-HI and USAG-Pōhakuloa controlled lands.

Based upon the analysis conducted in this EA, adoption and implementation of both ICRMPs, as written, would not constitute a major federal action significantly affecting the equality of the human environment. An issue of a Finding of No Significant Impact (FNSI) would be appropriate. The preparation of an Environmental Impact Statement (EIS) will not be required before proceeding with implementation of the Proposed Action.

CHAPTER 6 CONSULTATION AND COORDINATION

6.1 Agency Consultation and Coordination

United States Army Garrison, Hawai'i

Graham, Lisa

NEPA Program Manager, Environmental Division

Davis, Richard

Cultural Resource Manager, Environmental Division

United States Army Garrison, Pōhakuloa

Taomia, Julie

Cultural Resources Manager, Environmental Division.

6.2 Public Involvement

An announcement will be made available in the following local papers near USAG-HI and USAG-Pōhakuloa sub-installations to inform the public that both ICRMPs and the EA and draft FNSI are available for public review at nine library locations and on the official USAG-HI website

<https://www.garrison.hawaii.army.mil/NEPA/NEPA.htm>

Newspaper announcement location:

- Honolulu Star-Advertiser
- Hawai'i Tribune Herald
- West Hawai'i Today

Printed copies are made available at the following locations:

- Island of O'ahu library locations
 - Honolulu Library
 - Waianae
 - Waialua Library
 - Mililani Library
 - Wahiawā Library
- Island of Hawai'i library locations
 - Hilo Library
 - Kona Library
 - Waimea Library

Copies of the ICRMPs and the EA and draft FNSI will be dispersed on a CD to the following organizations:

- State Historic Preservation Division
- Hawai'i State Office of Hawaiian Affairs

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CHAPTER 8 REFERENCES

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32 CFR §651. Environmental Analysis of Army Actions.

36 CFR §61. Secretary of the Interior Professional Qualification Standards.

36 CFR §79. Curation of Federally-Owned and Administered Archaeological Collections.

36 CFR §800. Advisory Council on Historic Preservation.

40 CFR §1500-1508. Protection of Environment.

43 CFR §10. Native American Graves Protection and Repatriation Regulations.

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8.4. APPENDIX D: USAG-HI Cultural Resources Inventory

APPENDIX D.1: USAG-HI Archaeological Site Inventory

USAG-HI Archaeological Site Inventory

27-Oct-2015

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
13-0088	50-Oa-A7-12	AMR	Prehistoric	TBD	TBD
03-5482	SCS 4	DMR	Historic	determined not eligible for listing	TBD
03-5483	SCS 5	DMR	Prehistoric	determined not eligible for listing	TBD
03-5490	SCS 20	DMR	Historic	determined not eligible for listing	TBD
03-5491	SCS 21	DMR	Prehistoric	determined not eligible for listing	TBD
03-7091	TS 6, 8	DMR	Prehistoric	determined not eligible for listing	TBD
03-7095	TS-13	DMR	Historic	determined not eligible for listing	TBD
03-7099A	TS 19	DMR	Historic	determined not eligible for listing	TBD
03-7099B		DMR	Historic	determined not eligible for listing	TBD
03-7099C		DMR	Historic	determined not eligible for listing	TBD
03-7099F		DMR	Historic	determined not eligible for listing	TBD
03-7100	T21	DMR	Historic	determined not eligible for listing	TBD
03-7101		DMR	Prehistoric	determined not eligible for listing	TBD
DMR-D3	DMR-D3	DMR	Historic	determined not eligible for listing	TBD
03-7099E		DMR	Historic	ELIGIBLE	TBD
03-7102		DMR	Military	N/A	N/A
03-0416	SCS 11,12, 50-Oa-D2-4	DMR	Prehistoric	TBD	TBD
03-5479	SCS 1	DMR	Historic	TBD	TBD
03-5480	SCS 2	DMR	Historic	TBD	TBD
03-5481	SCS 3	DMR	Historic	TBD	TBD
03-5484	SCS 6,7,8	DMR	Prehistoric	TBD	TBD
03-5485	SCS 13	DMR	Prehistoric	TBD	TBD
03-5486	SCS 14,15	DMR	Prehistoric	TBD	TBD
03-5487	SCS 16,17	DMR	Prehistoric	TBD	TBD
03-5488	SCS 18	DMR	Historic	TBD	TBD
03-5489	SCS 19	DMR	Historic	TBD	TBD
03-5492	SCS 22	DMR	Historic	TBD	TBD
03-0191	SCS 9,10, 50-Oa-D2-3	DMR	Prehistoric	TBD	TBD
03-7090	TS 4	DMR	Prehistoric	TBD	TBD
03-7092	TS 7	DMR	Historic	TBD	TBD
03-7093	TS 9	DMR	Historic	TBD	TBD
03-7094	TS 10	DMR	Prehistoric	TBD	TBD
03-7096	TS 14,15	DMR	Prehistoric	TBD	TBD
03-7097	TS 16,17	DMR	Prehistoric	TBD	TBD
03-7099D		DMR	Historic	TBD	TBD
03-7099G		DMR	Historic	TBD	TBD
03-7103		DMR	Historic	TBD	TBD
03-7104		DMR	Prehistoric	TBD	TBD
DMR-D2	DMR-D2	DMR	Historic	TBD	TBD
14-4573		FDR	Prehistoric	determined not eligible for listing	TBD
14-3706		FDR	Historic	determined not eligible for listing	TBD
14-9500	Oa-A4-25	FDR	Prehistoric	determined not eligible for listing	TBD
14-9550		FDR	Prehistoric	determined not eligible for listing	TBD
14-4577		FDR	Prehistoric	ELIGIBLE	TBD
14-4966		FDR	Prehistoric	NEV	TBD
14-4570		FDR	Prehistoric	TBD	TBD
14-4574		FDR	Prehistoric	TBD	TBD
14-4576		FDR	Prehistoric	TBD	TBD
14-4579		FDR	Prehistoric	TBD	TBD
14-4575		FDR	Prehistoric	TBD	TBD
14-4580		FDR	Prehistoric	TBD	TBD
14-4590		FDR	Prehistoric	TBD	TBD
14-4970		FDR	Prehistoric	TBD	TBD
14-5353	SH-10	FSM	Historic	determined not eligible for listing	TBD
14-5356	SH-23	FSM	Historic	ELIGIBLE	TBD
14-5357	SH-26	FSM	Historic	ELIGIBLE	TBD
14-5364	SH-24	FSM	Historic	LISTED	TBD
	DPW-078	FSM	UNK	N/A	N/A
14-0086	PK-1, 50-Oa-A6-10	FSM	Prehistoric	NEV	TBD
14-5344	SH-X	FSM	Prehistoric	NEV	TBD
14-5352	PK-3 F-2	FSM	Prehistoric	NEV	TBD
14-5358	SH-35	FSM	Historic	NEV	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
14-5365		FSM	Prehistoric	NEV	TBD
14-5360	PK-2	FSM	Historic	NEV	TBD
14-7558	DPW-090	FSM	Prehistoric	NEV	TBD
14-9503	50-Oa-A6-21	FSM	Historic	NEV	TBD
14-5355	SH-20	FSM	Historic	TBD	TBD
14-5361	SH-28	FSM	Historic	TBD	TBD
14-9709		FSM	Historic	TBD	TBD
14-0075	50-Oa-A6-9	FSM	Prehistoric	TBD	TBD
14-5340	SH-24	FSM	Prehistoric	TBD	TBD
14-5341	SH-44	FSM	Prehistoric	TBD	TBD
14-5342	PK-4	FSM	TBD	TBD	TBD
14-5343	SH-10a	FSM	Prehistoric	TBD	TBD
14-5345	SH-15 F-1	FSM	Prehistoric	TBD	TBD
14-5346	SH-15 F-2	FSM	Prehistoric	TBD	TBD
14-5347	SH-16 A	FSM	Prehistoric	TBD	TBD
14-5348	SH-16	FSM	Prehistoric	TBD	TBD
14-5349	SH-17	FSM	Prehistoric	TBD	TBD
14-5350	SH-18	FSM	Prehistoric	TBD	TBD
14-5351	SH-37	FSM	Prehistoric	TBD	TBD
14-5354	SH-19	FSM	Historic	TBD	TBD
14-5359	SH-33	FSM	Historic	TBD	TBD
14-5362		FSM	Historic	TBD	TBD
14-5363	PK-1	FSM	Historic	TBD	TBD
14-5849		FSM	Historic	TBD	TBD
14-9714		FSM	Historic	TBD	TBD
09-9530	50-Oa-B5-15	KAS	Historic	TBD	TBD
KAS-1	1	KAS	Historic	TBD	TBD
KAS-2	2	KAS	Historic	TBD	TBD
09-9529	50-Oa-B5-14	KAS	Historic	TBD	TBD
09-9534	50-Oa-B5-16	KAS	Historic	TBD	TBD
Station	Kunia Field Station	KFS	Historic	TBD	TBD
trail	Pu'u Peahinaia trail	KLO	Prehistoric	determined not eligible for listing	TBD
D6-41	D6-41	KLO	Prehistoric	DNE	TBD
05-5638	SCS 34	KLO	Historic	ELIGIBLE	TBD
Home trail	trail	KLO	Historic	ELIGIBLE	TBD
trail	Kawai'ilu Ditch trail	KLO	Prehistoric	ELIGIBLE	TBD
Malaekahana Trail	Malaekahana Trail	KLO	Prehistoric	ELIGIBLE	TBD
Poamoho Trail	Poamoho Trail	KLO	Prehistoric	ELIGIBLE	TBD
04-5719	SCS-37	KLO	Historic	TBD	TBD
05-5606	SCS 2	KLO	Prehistoric	TBD	TBD
05-5607	SCS 3	KLO	Prehistoric	TBD	TBD
05-5608	SCS 4	KLO	Prehistoric	TBD	TBD
05-5609	SCS 5	KLO	Prehistoric	TBD	TBD
05-5610	SCS 6	KLO	Prehistoric	TBD	TBD
05-5611	SCS 7	KLO	Prehistoric	TBD	TBD
05-5612	SCS 8	KLO	Prehistoric	TBD	TBD
05-5613	SCS 9	KLO	Prehistoric	TBD	TBD
05-5619	SCS 15	KLO	Prehistoric	TBD	TBD
05-5620	SCS 16	KLO	Prehistoric	TBD	TBD
05-5621	SCS 17	KLO	Prehistoric	TBD	TBD
05-5622	SCS 18	KLO	Prehistoric	TBD	TBD
05-5623	SCS 19	KLO	Prehistoric	TBD	TBD
05-5634	SCS 30	KLO	Prehistoric	TBD	TBD
05-6443	T 21	KLO	Historic	TBD	TBD
D6-34	D6-34	KLO	Prehistoric	TBD	TBD
D6-43	D6-43	KLO	Prehistoric	TBD	TBD
04-5717	SCS-35	KLO	Prehistoric	TBD	TBD
04-5718	SCS-36	KLO	Prehistoric	TBD	TBD
04-5720	SCS-38	KLO	Prehistoric	TBD	TBD
04-5721	SCS-39	KLO	Prehistoric	TBD	TBD
05-5579	SCS 33	KLO	Prehistoric	TBD	TBD
05-5605	SCS 1	KLO	Historic	TBD	TBD
05-5614	SCS 10	KLO	Prehistoric	TBD	TBD
05-5615	SCS 11	KLO	Prehistoric	TBD	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
05-5616	SCS 12	KLO	Prehistoric	TBD	TBD
05-5617	SCS 13	KLO	Prehistoric	TBD	TBD
05-5618	SCS 14	KLO	Prehistoric	TBD	TBD
05-5624	SCS 20	KLO	Prehistoric	TBD	TBD
05-5625	SCS 21	KLO	Prehistoric	TBD	TBD
05-5626	SCS 22	KLO	Prehistoric	TBD	TBD
05-5627	SCS 23	KLO	Prehistoric	TBD	TBD
05-5628	SCS 24	KLO	Prehistoric	TBD	TBD
05-5629	SCS 25	KLO	Prehistoric	TBD	TBD
05-5630	SCS 26	KLO	Prehistoric	TBD	TBD
05-5631	SCS 27	KLO	Prehistoric	TBD	TBD
05-5632	SCS 28	KLO	Prehistoric	TBD	TBD
05-5633	SCS 29	KLO	Prehistoric	TBD	TBD
05-5637	SCS 33	KLO	Prehistoric	TBD	TBD
05-6431	T 5	KLO	TBD	TBD	TBD
05-6442	T 20	KLO	Historic	TBD	TBD
05-6447	T 26	KLO	TBD	TBD	TBD
05-9510	Bis. 9510, 50-Oa-D6-20	KLO	Prehistoric	TBD	TBD
05-9511	Bis. 9511, 50-Oa-D6-21	KLO	Prehistoric	TBD	TBD
05-9512	Bis. 9512, 50-Oa-D6-22	KLO	Prehistoric	TBD	TBD
05-9513	Bis. 9513, 50-Oa-D6-23	KLO	Prehistoric	TBD	TBD
05-9514	Bis. 9514, 50-Oa-D6-24	KLO	Prehistoric	TBD	TBD
D6-32	D6-32	KLO	Prehistoric	TBD	TBD
D6-33	D6-33	KLO	Prehistoric	TBD	TBD
D6-40	D6-40	KLO	Prehistoric	TBD	TBD
D6-42	D6-42	KLO	Prehistoric	TBD	TBD
05-5576	SCS 30	KLO	Prehistoric	TBD	TBD
05-5577	SCS 31	KLO	Prehistoric	TBD	TBD
05-5580	Ko'olau summit trail	KLO	Prehistoric	TBD	TBD
05-6432	T 6	KLO	Historic	TBD	TBD
05-6433	T 7	KLO	Historic	TBD	TBD
05-6441	T 19	KLO	Historic	TBD	TBD
05-6444	T 22	KLO	Historic	TBD	TBD
05-6449	T 29	KLO	Historic	TBD	TBD
D6-36	D6-36	KLO	Prehistoric	TBD	TBD
D6-37	D6-37	KLO	TBD	TBD	TBD
D6-38	D6-38	KLO	Prehistoric	TBD	TBD
DPW-014	DPW-014	KLO	TBD	TBD	TBD
DPW-101	DPW 101	KLO	Historic	TBD	TBD
Drum Road	Drum Road	KLO	Historic	TBD	TBD
trail	Kaunala (east) trail	KLO	Prehistoric	TBD	TBD
trail	Kaunala (west) trail	KLO	Prehistoric	TBD	TBD
Paumalu Gulch	Gulch trail	KLO	Prehistoric	TBD	TBD
Kawainui trail	Kawainui trail	KLO	Prehistoric	TBD	TBD
trail	Pupukea Summit trail	KLO	Prehistoric	TBD	TBD
Waialele trail	Waialele trail	KLO	Prehistoric	TBD	TBD
02-6536	add GANDA T10	KTA	Historic	determined not eligible for listing	TBD
02-5538		KTA	Prehistoric	determined not eligible for listing	TBD
02-7210	GTS-2078-9	KTA	Prehistoric	determined not eligible for listing	TBD
02-9508	50-Oa-F3-8	KTA	Prehistoric	determined not eligible for listing	TBD
2	2	KTA	Historic	determined not eligible for listing	TBD
4	4	KTA	Historic	determined not eligible for listing	TBD
GTS-2078-2	GTS-2078-2	KTA	Prehistoric	determined not eligible for listing	TBD
02-6677		KTA	Historic	determined not eligible for listing	TBD
CSH-1	CSH-1	KTA	Historic	determined not eligible for listing	TBD
CSU-021	CSU-021	KTA	Prehistoric	determined not eligible for listing	TBD
DPW-072	DPW-072, GTS-2097-1	KTA	TBD	determined not eligible for listing	TBD
DPW-074	DPW 74	KTA	Historic	determined not eligible for listing	TBD
DPW-098	DPW 98	KTA	Historic	determined not eligible for listing	TBD
DPW-102	DPW-102	KTA	Prehistoric	determined not eligible for listing	TBD
GANDA T2	GANDA T2	KTA	Prehistoric	determined not eligible for listing	TBD
GANDA T20	GANDA T20	KTA	TBD	determined not eligible for listing	TBD
GANDA T8	GANDA T8	KTA	TBD	determined not eligible for listing	TBD
GTS-2078-3	GTS-2078-3	KTA	Prehistoric	determined not eligible for listing	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
Kahuku Access	Kahuku Access	KTA	Prehistoric	determined not eligible for listing	TBD
Pohaku Preserve	Pohaku Preserve	KTA	Prehistoric	determined not eligible for listing	TBD
108/109/110	SCS-KTA-TS-108/109/110	KTA	Historic	determined not eligible for listing	TBD
SCS-KTA-TS-121	SCS-KTA-TS-121	KTA	Historic	determined not eligible for listing	TBD
SCS-KTA-TS-129	SCS-KTA-TS-129	KTA	Historic	determined not eligible for listing	TBD
SCS-KTA-TS-145	SCS-KTA-TS-145	KTA	Historic	determined not eligible for listing	TBD
SCS-KTA-TS-146	SCS-KTA-TS-146	KTA	Historic	determined not eligible for listing	TBD
76/141	SCS-KTA-TS-76/141	KTA	Historic	determined not eligible for listing	TBD
02-6436	T 10	KTA	Historic	DNE	TBD
02-6440	T 18	KTA	Historic	DNE	TBD
02-6970	SCS TS-3	KTA	Historic	DNE	TBD
CSU-007	CSU-007	KTA	Prehistoric	DNE	TBD
CSU-016	CSU-016	KTA	Prehistoric	DNE	TBD
extension	GANDA T2 extension	KTA	Prehistoric	DNE	TBD
GTS-2078-5	GTS-2078-5	KTA	Prehistoric	DNE	TBD
OA-17	KTA-NIKE	KTA	Historic	DNE	TBD
SWCA-KTA-TS-8	SWCA-KTA-TS-8	KTA	Historic	DNE	TBD
02-0259	50-Oa-F3-4	KTA	Prehistoric	ELIGIBLE	TBD
02-0260	50-Oa-F4-1	KTA	Prehistoric	ELIGIBLE	TBD
02-5537		KTA	Prehistoric	ELIGIBLE	TBD
02-9509	50-Oa-F3-9	KTA	Prehistoric	ELIGIBLE	TBD
02-6676		KTA	Historic	ELIGIBLE	TBD
GANDA T11	GANDA T11	KTA	TBD	ELIGIBLE	TBD
GANDA T13	GANDA T13	KTA	Prehistoric	ELIGIBLE	TBD
GANDA T21	GANDA T21	KTA	TBD	ELIGIBLE	TBD
GANDA T23	GANDA T23	KTA	TBD	ELIGIBLE	TBD
GANDA T24	GANDA T24	KTA	TBD	ELIGIBLE	TBD
GTS-2078-6	GTS-2078-6	KTA	Prehistoric	ELIGIBLE	TBD
Kahuku trail	Kahuku trail	KTA	Prehistoric	ELIGIBLE	TBD
KTA-T07	KTA-T07	KTA	Prehistoric	ELIGIBLE	TBD
Access Trail	Malaekahana Access Trail	KTA	Prehistoric	ELIGIBLE	TBD
OA-17	KTA-NIKE	KTA	Historic	ELIGIBLE	TBD
OA-17	KTA-NIKE	KTA	Historic	ELIGIBLE	TBD
OA-17	KTA-NIKE	KTA	Historic	ELIGIBLE	TBD
military road	road	KTA	Historic	ELIGIBLE	TBD
SCS-KTA-TS-134	SCS-KTA-TS-134	KTA	Historic	ELIGIBLE	TBD
SCS-KTA-TS-135	SCS-KTA-TS-135	KTA	Historic	ELIGIBLE	TBD
SCS-KTA-TS-136	SCS-KTA-TS-136	KTA	Historic	ELIGIBLE	TBD
SCS-KTA-TS-142	SCS-KTA-TS-142	KTA	Historic	ELIGIBLE	TBD
SCS-KTA-TS-74	SCS-KTA-TS-74	KTA	Historic	ELIGIBLE	TBD
SCS-KTA-TS-97	SCS-KTA-TS-97	KTA	Historic	ELIGIBLE	TBD
DPW-103	DPW 103	KTA	Prehistoric	LISTED	TBD
NA	DPW-013	KTA	UNK	N/A	N/A
NA	KTA-TS23	KTA	UNK	N/A	N/A
	DPW-088	KTA	UNK	N/A	N/A
02-4882		KTA	Historic	NEV	TBD
02-4885		KTA	Prehistoric	NEV	TBD
02-4886		KTA	Historic	NEV	TBD
02-5689		KTA	Historic	NEV	TBD
02-5690		KTA	Historic	NEV	TBD
02-1043	50-Oa-F3-3	KTA	Prehistoric	NEV	TBD
02-2357	50-Oa-F3-10	KTA	Historic	NEV	TBD
02-2358	50-Oa-F3-11	KTA	Prehistoric	NEV	TBD
02-2359	50-Oa-F3-12	KTA	Prehistoric	NEV	TBD
02-2360	50-Oa-F3-13	KTA	Prehistoric	NEV	TBD
02-4883		KTA	Historic	NEV	TBD
02-4884		KTA	Prehistoric	NEV	TBD
02-4887		KTA	Prehistoric	NEV	TBD
02-4888		KTA	TBD	NEV	TBD
02-5534		KTA	Prehistoric	NEV	TBD
02-5536		KTA	TBD	NEV	TBD
02-5539		KTA	Prehistoric	NEV	TBD
02-5684		KTA	Prehistoric	NEV	TBD
02-5685		KTA	Prehistoric	NEV	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
02-5686		KTA	Historic	NEV	TBD
02-5688		KTA	Historic	NEV	TBD
02-4881		KTA	Historic	NEV	TBD
02-6438	T 12	KTA	Historic	NEV	TBD
02-6537	SCS 38,40,41,43,44-48	KTA	Historic	NEV	TBD
02-6980	SCS TS-13	KTA	Historic	NEV	TBD
02-6993	SCS TS-27	KTA	Historic	NEV	TBD
02-6994	SCS TS-29	KTA	Prehistoric	NEV	TBD
02-7015	SCS TS-51	KTA	Prehistoric	NEV	TBD
02-7016	SCS TS-52	KTA	Historic	NEV	TBD
02-7017	SCS TS-53	KTA	Historic	NEV	TBD
02-7018	SCS TS-54	KTA	Historic	NEV	TBD
02-7019	SCS TS-55	KTA	Historic	NEV	TBD
02-7022	SCS TS-58	KTA	Prehistoric	NEV	TBD
02-7025	SCS TS-61	KTA	Historic	NEV	TBD
02-7026	SCS TS-62	KTA	Historic	NEV	TBD
02-7028	SCS TS-64	KTA	Historic	NEV	TBD
02-7029	SCS TS-65	KTA	Prehistoric	NEV	TBD
02-7209	GTS-2078-8	KTA	Prehistoric	NEV	TBD
SCS 39	SCS 39	KTA	Historic	NEV	TBD
SCS 42	SCS 42	KTA	Historic	NEV	TBD
SWCA-KTA-TS-1	SWCA-KTA-TS-1	KTA	Historic	NEV	TBD
SWCA-KTA-TS-2	SWCA-KTA-TS-2	KTA	Prehistoric	NEV	TBD
SWCA-KTA-TS-5	SWCA-KTA-TS-5	KTA	Historic	NEV	TBD
02-2501	NRHP 73, 50-Oa-F3-6	KTA	Prehistoric	TBD	TBD
02-4599	02-04599, 02-0599	KTA	Historic	TBD	TBD
02-9745	NRHP 90&91, NHL 94	KTA	Historic	TBD	TBD
02-5535		KTA	Prehistoric	TBD	TBD
02-5540		KTA	Prehistoric	TBD	TBD
02-6439	T 15, T 3	KTA	Historic	TBD	TBD
02-6535		KTA	Prehistoric	TBD	TBD
02-7203	SWCA-KTA-TS-9	KTA	Prehistoric	TBD	TBD
02-9506	50-Oa-F5-10	KTA	Prehistoric	TBD	TBD
02-9507	50-Oa-F3-7	KTA	Prehistoric	TBD	TBD
02-9517	50-Oa-F2-2	KTA	Prehistoric	TBD	TBD
05-5635	SCS 31	KTA	Prehistoric	TBD	TBD
1	1	KTA	Historic	TBD	TBD
3	3	KTA	Historic	TBD	TBD
5	5	KTA	Historic	TBD	TBD
6	6	KTA	Historic	TBD	TBD
GTS-2078-1	GTS-2078-1	KTA	Prehistoric	TBD	TBD
GTS-2078-10	GTS-2078-10	KTA	Prehistoric	TBD	TBD
GTS-2078-7	GTS-2078-7	KTA	Prehistoric	TBD	TBD
02-6437	T11	KTA	Historic	TBD	TBD
02-6969	SCS TS-2	KTA	Historic	TBD	TBD
02-6971	SCS TS-4	KTA	Historic	TBD	TBD
02-6972	SCS TS-5	KTA	Historic	TBD	TBD
02-6973	SCS TS-6	KTA	Historic	TBD	TBD
02-6974	SCS TS-7	KTA	Prehistoric	TBD	TBD
02-6975	SCS TS-8	KTA	Historic	TBD	TBD
02-6976	SCS TS-9	KTA	Historic	TBD	TBD
02-6977	SCS TS-10	KTA	Historic	TBD	TBD
02-6978	SCS TS-11	KTA	Historic	TBD	TBD
02-6979	SCS TS-12	KTA	Historic	TBD	TBD
02-6981	SCS TS-14	KTA	Historic	TBD	TBD
02-6982	SCS TS-15	KTA	Historic	TBD	TBD
02-6983	SCS TS-16	KTA	Historic	TBD	TBD
02-6984	SCS TS-17	KTA	Historic	TBD	TBD
02-6998	SCS TS-34	KTA	Prehistoric	TBD	TBD
02-7023	SCS TS-59	KTA	Historic	TBD	TBD
05-6448	T 28	KTA	Historic	TBD	TBD
CSU-001	CSU-001	KTA	Prehistoric	TBD	TBD
CSU-002	CSU-002	KTA	Prehistoric	TBD	TBD
CSU-003	CSU-003	KTA	Prehistoric	TBD	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
CSU-004	CSU-004	KTA	Historic	TBD	TBD
CSU-005	CSU-005	KTA	Historic	TBD	TBD
CSU-006	CSU-006	KTA	Prehistoric	TBD	TBD
CSU-008	CSU-008	KTA	Historic	TBD	TBD
CSU-009	CSU-009	KTA	Prehistoric	TBD	TBD
CSU-010	CSU-010	KTA	Prehistoric	TBD	TBD
CSU-011	CSU-011	KTA	Prehistoric	TBD	TBD
CSU-012	CSU-012	KTA	Prehistoric	TBD	TBD
CSU-013	CSU-013	KTA	Prehistoric	TBD	TBD
CSU-014	CSU-014	KTA	Prehistoric	TBD	TBD
CSU-015	CSU-015	KTA	Prehistoric	TBD	TBD
CSU-017	CSU-017	KTA	Prehistoric	TBD	TBD
CSU-018	CSU-018	KTA	Prehistoric	TBD	TBD
CSU-019	CSU-019	KTA	Prehistoric	TBD	TBD
CSU-020	CSU-020	KTA	Prehistoric	TBD	TBD
DPW-066	DPW-66	KTA	Historic	TBD	TBD
DPW-095	DPW 95	KTA	Historic	TBD	TBD
DPW-096	DPW 96	KTA	TBD	TBD	TBD
DPW-097	DPW 97	KTA	TBD	TBD	TBD
DPW-099	DPW 99	KTA	Prehistoric	TBD	TBD
DPW-104	DPW 104	KTA	Historic	TBD	TBD
GANDA T1	GANDA T1	KTA	Prehistoric	TBD	TBD
GANDA T12	GANDA T12	KTA	TBD	TBD	TBD
GANDA T22	GANDA T22	KTA	TBD	TBD	TBD
GANDA T25	GANDA T25	KTA	TBD	TBD	TBD
GANDA T3	GANDA T3	KTA	TBD	TBD	TBD
GANDA T4	GANDA T4	KTA	TBD	TBD	TBD
GANDA T5	GANDA T5	KTA	TBD	TBD	TBD
GANDA T6	GANDA T6	KTA	TBD	TBD	TBD
GANDA T7	GANDA T7	KTA	TBD	TBD	TBD
GANDA T9	GANDA T9	KTA	TBD	TBD	TBD
SCS-KTA-TS-128	SCS-KTA-TS-128	KTA	Historic	TBD	TBD
SCS-KTA-TS-130	SCS-KTA-TS-130	KTA	Historic	TBD	TBD
SCS-KTA-TS-131	SCS-KTA-TS-131	KTA	Historic	TBD	TBD
SCS-KTA-TS-132	SCS-KTA-TS-132	KTA	Historic	TBD	TBD
SCS-KTA-TS-133	SCS-KTA-TS-133	KTA	Historic	TBD	TBD
SWCA-KTA-TS-3	SWCA-KTA-TS-3	KTA	Prehistoric	TBD	TBD
08-5436	SCS 61	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-5439	SCS 65	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-5440	SCS 66	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-5441	SCS 67	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6466	GANDA 5	KUNTA	Historic	determined not eligible for listing	TBD
08-6470	GANDA 7,11,13,15,17,19,23	KUNTA	Historic	determined not eligible for listing	TBD
08-6472	GANDA 14	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6473	GANDA 16	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6475	GANDA 18	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6476	GANDA 24	KUNTA	Historic	determined not eligible for listing	TBD
08-6478	GANDA 26	KUNTA	Historic	determined not eligible for listing	TBD
08-6479	GANDA 27	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6482	GANDA 30	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6485	GANDA 34	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6486	GANDA 36	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6487	GANDA 38	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6488	GANDA 39	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6489	GANDA 40	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6490	GANDA 41	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6491	GANDA 42	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6492	GANDA 44	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6493	GANDA 45	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6496	GANDA 51	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6497	GANDA 53	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6498	GANDA 54	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-9528	50-Oa-E1-9	KUNTA	Prehistoric	determined not eligible for listing	TBD
08-6463	GANDA 2	KUNTA	Historic	determined not eligible for listing	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
08-6468	GANDA 7,9	KUNTA	Historic	determined not eligible for listing	TBD
08-6474	GANDA 17	KUNTA	Historic	determined not eligible for listing	TBD
08-6480	GANDA 28	KUNTA	Historic	determined not eligible for listing	TBD
08-6495	GANDA 47,48,49,50	KUNTA	Historic	determined not eligible for listing	TBD
DPW-004	DPW-004	KUNTA	Historic	determined not eligible for listing	TBD
DPW-012	DPW-012	KUNTA	Historic	determined not eligible for listing	TBD
08-6469	GANDA 10	KUNTA	Prehistoric	NEV	TBD
08-6471	GANDA 12,20,22	KUNTA	Historic	NEV	TBD
08-6477	GANDA 25	KUNTA	Prehistoric	NEV	TBD
08-5437	SCS 63	KUNTA	Prehistoric	TBD	TBD
08-5438	SCS 64	KUNTA	Prehistoric	TBD	TBD
08-6462	GANDA 1	KUNTA	Historic	TBD	TBD
08-6465	GANDA 4	KUNTA	Historic	TBD	TBD
08-6481	GANDA 29	KUNTA	Prehistoric	TBD	TBD
08-6483	GANDA 31	KUNTA	Prehistoric	TBD	TBD
08-6484	GANDA 32	KUNTA	Prehistoric	TBD	TBD
08-6651	GANDA 100	KUNTA	Prehistoric	TBD	TBD
08-6652	GANDA 101	KUNTA	Prehistoric	TBD	TBD
08-6653	GANDA 102	KUNTA	Prehistoric	TBD	TBD
08-6464	GANDA 3	KUNTA	Historic	TBD	TBD
08-6467	GANDA 6,8	KUNTA	Historic	TBD	TBD
DPW-039	DPW-039	KUNTA	Prehistoric	TBD	TBD
DPW-040	DPW-040	KUNTA	Historic	TBD	TBD
DPW-087	DPW-087	KUNTA	Historic	TBD	TBD
DPW-109	DPW 109	KUNTA	Prehistoric	TBD	TBD
DPW-110	DPW 110	KUNTA	TBD	TBD	TBD
DPW-124	DPW-124	KUNTA	Prehistoric	TBD	TBD
08-0136		MKS	UNK	N/A	N/A
03-4540		MMR	Prehistoric	determined not eligible for listing	TBD
03-4542		MMR	Prehistoric	determined not eligible for listing	TBD
03-4543		MMR	Prehistoric	determined not eligible for listing	TBD
03-4544		MMR	Prehistoric	determined not eligible for listing	TBD
03-4546		MMR	Prehistoric	determined not eligible for listing	TBD
03-5926		MMR	Prehistoric	determined not eligible for listing	TBD
03-6505	GANDA 7	MMR	Prehistoric	determined not eligible for listing	TBD
03-6596	GANDA 25	MMR	Prehistoric	determined not eligible for listing	TBD
03-6597	GANDA 26	MMR	Prehistoric	determined not eligible for listing	TBD
03-4541		MMR	Prehistoric	determined not eligible for listing	TBD
03-4545		MMR	Prehistoric	determined not eligible for listing	TBD
03-4629		MMR	Prehistoric	determined not eligible for listing	TBD
03-5456		MMR	Prehistoric	determined not eligible for listing	TBD
03-5587		MMR	Prehistoric	determined not eligible for listing	TBD
03-5589		MMR	Prehistoric	determined not eligible for listing	TBD
03-5734		MMR	Prehistoric	determined not eligible for listing	TBD
03-5735		MMR	Prehistoric	determined not eligible for listing	TBD
03-5777		MMR	Prehistoric	determined not eligible for listing	TBD
03-5778		MMR	Prehistoric	determined not eligible for listing	TBD
03-5921		MMR	Prehistoric	determined not eligible for listing	TBD
03-5923		MMR	Historic	determined not eligible for listing	TBD
03-5930		MMR	Prehistoric	determined not eligible for listing	TBD
03-5932		MMR	Historic	determined not eligible for listing	TBD
03-6500	GANDA 2	MMR	Prehistoric	determined not eligible for listing	TBD
03-6502	GANDA 4	MMR	Prehistoric	determined not eligible for listing	TBD
03-6507	GANDA 9	MMR	TBD	determined not eligible for listing	TBD
03-6508	GANDA 10	MMR	Prehistoric	determined not eligible for listing	TBD
03-6509	GANDA 11	MMR	Prehistoric	determined not eligible for listing	TBD
03-6595	GANDA 24	MMR	Prehistoric	determined not eligible for listing	TBD
03-6598	GANDA 27	MMR	Prehistoric	determined not eligible for listing	TBD
03-6504	GANDA 6	MMR	Prehistoric	determined not eligible for listing	TBD
03-6594	GANDA 23	MMR	Prehistoric	determined not eligible for listing	TBD
03-6630	GANDA 59	MMR	Prehistoric	DNE	TBD
03-4547		MMR	Prehistoric	ELIGIBLE	TBD
03-5590		MMR	Prehistoric	ELIGIBLE	TBD
03-4628		MMR	Prehistoric	ELIGIBLE	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
03-5588		MMR	Prehistoric	ELIGIBLE	TBD
03-5922		MMR	Prehistoric	ELIGIBLE	TBD
03-5924		MMR	Prehistoric	ELIGIBLE	TBD
03-5925		MMR	Prehistoric	ELIGIBLE	TBD
03-6499	GANDA 1	MMR	Prehistoric	ELIGIBLE	TBD
03-6528	GANDA 20	MMR	Prehistoric	ELIGIBLE	TBD
03-6599	GANDA 28	MMR	Prehistoric	ELIGIBLE	TBD
03-6625	GANDA 54	MMR	Prehistoric	ELIGIBLE	TBD
DPW-033	DPW-033	MMR	Prehistoric	ELIGIBLE	TBD
03-6616	GANDA 45	MMR	Prehistoric	LISTED	TBD
03-6612	GANDA 41	MMR	Prehistoric	LISTED	TBD
03-6614	GANDA 43	MMR	Prehistoric	LISTED	TBD
03-0184		MMR	Prehistoric	N/A	N/A
03-0185	NA	MMR	UNK	N/A	N/A
NA	DPW-091	MMR	UNK	N/A	N/A
NA	DPW-092	MMR	UNK	N/A	N/A
03-5920		MMR	Prehistoric	NEV	TBD
03-9526	50-Oa-C6-13	MMR	Historic	NEV	TBD
03-0178	50-Oa-C6-2	MMR	Prehistoric	NEV	TBD
03-6617	GANDA 46	MMR	Prehistoric	RECOMMENDNO	TBD
03-6626	GANDA 55	MMR	Prehistoric	RECOMMENDNO	TBD
03-9518	50-Oa-C6-6	MMR	Prehistoric	RECOMMENDNO	TBD
03-9521	50-Oa-C6-8	MMR	Prehistoric	RECOMMENDNO	TBD
03-9525	50-Oa-C6-12	MMR	Historic	RECOMMENDNO	TBD
03-9533	50-Oa-C6-14	MMR	Prehistoric	RECOMMENDNO	TBD
03-4537		MMR	Prehistoric	TBD	TBD
03-5595		MMR	Historic	TBD	TBD
03-0177		MMR	Prehistoric	TBD	TBD
03-0181	50-Oa-C6-1	MMR	Prehistoric	TBD	TBD
03-6593	GANDA 22	MMR	Prehistoric	TBD	TBD
03-6603	GANDA 33	MMR	Prehistoric	TBD	TBD
03-6613	GANDA 42	MMR	Prehistoric	TBD	TBD
03-6621	GANDA 50	MMR	Prehistoric	TBD	TBD
03-4536		MMR	Prehistoric	TBD	TBD
03-4538		MMR	Prehistoric	TBD	TBD
03-4539		MMR	Prehistoric	TBD	TBD
03-4627		MMR	Prehistoric	TBD	TBD
03-4630		MMR	Historic	TBD	TBD
03-5775		MMR	Prehistoric	TBD	TBD
03-5776		MMR	Prehistoric	TBD	TBD
03-5927		MMR	Historic	TBD	TBD
03-5928		MMR	Prehistoric	TBD	TBD
03-5929		MMR	Historic	TBD	TBD
03-5931		MMR	Prehistoric	TBD	TBD
03-6501	GANDA 21	MMR	Prehistoric	TBD	TBD
03-6503	GANDA 5	MMR	Prehistoric	TBD	TBD
03-6506	GANDA 8	MMR	Prehistoric	TBD	TBD
03-6510	GANDA 12	MMR	Prehistoric	TBD	TBD
03-6511	GANDA 13	MMR	Prehistoric	TBD	TBD
03-6512	GANDA 14	MMR	Prehistoric	TBD	TBD
03-6513	GANDA 15	MMR	Prehistoric	TBD	TBD
03-6527	GANDA 19	MMR	Prehistoric	TBD	TBD
03-6600	GANDA 29	MMR	Prehistoric	TBD	TBD
03-6601	GANDA 30	MMR	Prehistoric	TBD	TBD
03-6602	GANDA 31	MMR	Prehistoric	TBD	TBD
03-6605	GANDA 34	MMR	Prehistoric	TBD	TBD
03-6606	GANDA 35	MMR	Prehistoric	TBD	TBD
03-6607	GANDA 36	MMR	Prehistoric	TBD	TBD
03-6608	GANDA 37	MMR	Prehistoric	TBD	TBD
03-6610	GANDA 39	MMR	Prehistoric	TBD	TBD
03-6611	GANDA 40	MMR	Prehistoric	TBD	TBD
03-6615	GANDA 44	MMR	Prehistoric	TBD	TBD
03-6618	GANDA 47	MMR	Prehistoric	TBD	TBD
03-6620	GANDA 49	MMR	Prehistoric	TBD	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
03-6622	GANDA 51	MMR	Prehistoric	TBD	TBD
03-6623	GANDA 52	MMR	Prehistoric	TBD	TBD
03-6624	GANDA 53	MMR	Prehistoric	TBD	TBD
03-6628	GANDA 57	MMR	Prehistoric	TBD	TBD
03-6629	GANDA 58	MMR	Prehistoric	TBD	TBD
03-9520	50-Oa-C6-7	MMR	Prehistoric	TBD	TBD
03-9522	50-Oa-C6-9	MMR	Prehistoric	TBD	TBD
03-9523	50-Oa-C6-10	MMR	Prehistoric	TBD	TBD
03-9524	50-Oa-C6-11	MMR	Prehistoric	TBD	TBD
03-9531	50-Oa-C7-7	MMR	Prehistoric	TBD	TBD
03-0180	50-Oa-C6-4	MMR	Prehistoric	TBD	TBD
03-6514	GANDA 16	MMR	Prehistoric	TBD	TBD
03-6525	GANDA 17	MMR	Prehistoric	TBD	TBD
03-6526	GANDA 18	MMR	Prehistoric	TBD	TBD
03-6604	GANDA 32	MMR	Prehistoric	TBD	TBD
03-6609	GANDA 38	MMR	Historic	TBD	TBD
03-6619	GANDA 48	MMR	Prehistoric	TBD	TBD
03-6627	GANDA 56	MMR	Historic	TBD	TBD
03-6631	GANDA 60	MMR	Historic	TBD	TBD
DPW-032	DPW-032	MMR	Prehistoric	to be determined	TBD
05-3998	50-Oa-C3-23	PAR	Prehistoric	to be determined	TBD
08-9807	NRHP 98	SBC	Historic	Listed, 1998	TBD
08-9808	NRHP 98	SBC	Historic	Listed, 1998	TBD
NONE-1	NONE-1	SBC	Historic	n/a	TBD
NONE-4	NONE-4	SBC	Historic	NEV	TBD
NONE-5	NONE-5	SBC	Historic	NEV	TBD
NONE-2	NONE-2	SBC	Historic	TBD	TBD
NONE-3	NONE-3	SBC	Historic	TBD	TBD
NONE-6	NONE-6	SBC	Historic	TBD	TBD
NONE-7	NONE-7	SBC	Historic	TBD	TBD
NONE-8	NONE-8	SBC	Historic	TBD	TBD
SCS-SBC-TS-4	SCS-SBC-TS-4	SBC	Historic	TBD	TBD
SCS-SBC-TS-5	SCS-SBC-TS-5	SBC	Historic	TBD	TBD
SCS-SBC-TS-6	SCS-SBC-TS-6	SBC	Historic	TBD	TBD
09-5382	SCS-4	SBE	Historic	TBD	TBD
09-5384	SCS-6	SBE	Historic	TBD	TBD
09-5383	SCS-5	SBE	Prehistoric	TBD	TBD
09-5411	SCS-35	SBE	Prehistoric	TBD	TBD
05-5501	SCS 83	SBE	Historic	TBD	TBD
05-5508	SCS 90	SBE	Historic	TBD	TBD
05-5509	SCS 91	SBE	Historic	TBD	TBD
05-5510	SCS 92	SBE	Historic	TBD	TBD
08-5511	SCS 93	SBE	Historic	TBD	TBD
09-0204	50-Oa-E1-7	SBE	Prehistoric	TBD	TBD
09-7833	DPW-117	SBE	Historic	TBD	TBD
09-5461	SCS-80	SBE	Historic	to be determined	TBD
05-5500	SCS 82	SBE	Historic	to be determined	TBD
08-5392	SCS 14	SBS	Prehistoric	NEV	TBD
08-5396	SCS 18	SBS	Prehistoric	NEV	TBD
08-5434	SCS 59	SBS	Prehistoric	NEV	TBD
08-5421	SCS 46	SBS	Prehistoric	NEV	TBD
08-5422	SCS 47	SBS	Prehistoric	NEV	TBD
08-5447	SCS 77	SBS	Prehistoric	NEV	TBD
08-5449	SCS 79	SBS	Prehistoric	NEV	TBD
08-5385	SCS 7	SBS	Historic	NEV	TBD
08-5388	SCS 10	SBS	Prehistoric	NEV	TBD
08-5389	SCS 11	SBS	Prehistoric	NEV	TBD
08-5391	SCS 13	SBS	Prehistoric	NEV	TBD
08-5413	SCS 38	SBS	Prehistoric	NEV	TBD
08-5415	SCS 40	SBS	Prehistoric	NEV	TBD
08-5417	SCS 42	SBS	Prehistoric	NEV	TBD
08-5418	SCS 43	SBS	Prehistoric	NEV	TBD
08-5462	SCS 81	SBS	Historic	NEV	TBD
08-6494	GANDA 46	SBS	Prehistoric	NEV	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
08-5505	SCS 87	SBS	Historic	NEV	TBD
08-5506	SCS 88	SBS	Historic	NEV	TBD
08-5507	SCS 89	SBS	Prehistoric	NEV	TBD
Bottle dump	Bottle dump	SBS	Historic	NEV	TBD
Site 1	Site 1	SBS	Historic	NEV	TBD
Site 2	Site 2	SBS	Historic	NEV	TBD
Site 4	Site 4	SBS	Prehistoric	NEV	TBD
Site 5	Site 5	SBS	Prehistoric	NEV	TBD
Site 6	Site 6	SBS	Historic	NEV	TBD
Site 7	Site 7	SBS	Historic	NEV	TBD
Site 8	Site 8	SBS	Prehistoric	NEV	TBD
08-0214	50-Oa-E1-2	SBS	Prehistoric	TBD	TBD
08-5393	SCS 15	SBS	Prehistoric	TBD	TBD
08-5394	SCS 16	SBS	Prehistoric	TBD	TBD
08-5397	SCS 19	SBS	Prehistoric	TBD	TBD
08-5409	SCS 32	SBS	Historic	TBD	TBD
08-5448	SCS 78	SBS	Prehistoric	TBD	TBD
08-5420	SCS 45	SBS	Prehistoric	TBD	TBD
08-5427	SCS 52	SBS	Prehistoric	TBD	TBD
08-5386	SCS 8	SBS	Prehistoric	TBD	TBD
08-5387	SCS 9	SBS	Prehistoric	TBD	TBD
08-5390	SCS 12	SBS	Prehistoric	TBD	TBD
08-5395	SCS 17	SBS	Historic	TBD	TBD
08-5398	SCS 20	SBS	Prehistoric	TBD	TBD
08-5399	SCS 21	SBS	Prehistoric	TBD	TBD
08-5400	SCS 23	SBS	Prehistoric	TBD	TBD
08-5401	SCS 24	SBS	Prehistoric	TBD	TBD
08-5407	SCS 30	SBS	Prehistoric	TBD	TBD
08-5408	SCS 31	SBS	Prehistoric	TBD	TBD
08-5410	SCS 33	SBS	Prehistoric	TBD	TBD
08-5412	SCS 37	SBS	Prehistoric	TBD	TBD
08-5414	SCS 39	SBS	Prehistoric	TBD	TBD
08-5416	SCS 41	SBS	Prehistoric	TBD	TBD
08-5419	SCS 44	SBS	Prehistoric	TBD	TBD
08-5424	SCS 49	SBS	Prehistoric	TBD	TBD
08-5425	SCS 50	SBS	Prehistoric	TBD	TBD
08-5426	SCS 51	SBS	Prehistoric	TBD	TBD
08-5428	SCS 53	SBS	Prehistoric	TBD	TBD
08-5429	SCS 54	SBS	Prehistoric	TBD	TBD
08-5430	SCS 55	SBS	Prehistoric	TBD	TBD
08-5431	SCS 56	SBS	Prehistoric	TBD	TBD
08-5432	SCS 57	SBS	Historic	TBD	TBD
08-5435	SCS 60	SBS	Prehistoric	TBD	TBD
08-5433	SCS 58	SBS	Prehistoric	to be determined	TBD
08-5423	SCS 48	SBS	Prehistoric	to be determined	TBD
04-5404	SCS 27	SBW	Prehistoric	determined not eligible for listing	TBD
DPW-118	DPW-118	SBW	Prehistoric	determined not eligible for listing	TBD
DPW-119	DPW-119	SBW	Historic	determined not eligible for listing	TBD
DPW-120	DPW-120	SBW	Prehistoric	determined not eligible for listing	TBD
DPW-123	DPW-123	SBW	Prehistoric	DNE	TBD
04-5519	NA	SBW	UNK	N/A	N/A
NA	DPW-071	SBW	UNK	N/A	N/A
	DPW-070	SBW	UNK	N/A	N/A
	DPW-084	SBW	UNK	N/A	N/A
04-5517	SCS 99	SBW	Prehistoric	NEV	TBD
DPW-067	DPW 67	SBW	Prehistoric	NEV	TBD
04-0215	GANDA 178,179, 50-Oa-E1-4	SBW	Prehistoric	TBD	TBD
04-0216	50-Oa-E1-5	SBW	Prehistoric	TBD	TBD
04-5380	SCS 2	SBW	Prehistoric	TBD	TBD
04-5402	SCS 25	SBW	Prehistoric	TBD	TBD
04-5403	SCS 26	SBW	Prehistoric	TBD	TBD
04-5405	SCS 28	SBW	Prehistoric	TBD	TBD
04-5406	SCS 29	SBW	Prehistoric	TBD	TBD
04-5445	SCS 75	SBW	Prehistoric	TBD	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
04-5446	SCS 76	SBW	Prehistoric	TBD	TBD
08-5443	SCS 69	SBW	Historic	TBD	TBD
04-5379	SCS 1, DPW 83	SBW	Historic	TBD	TBD
04-5442	SCS 68	SBW	Prehistoric	TBD	TBD
04-5514	SCS 96	SBW	Prehistoric	TBD	TBD
04-5515	SCS 97	SBW	Prehistoric	TBD	TBD
04-5516	SCS 98	SBW	Prehistoric	TBD	TBD
04-7154	TS 210, GANDA 210	SBW	Prehistoric	TBD	TBD
08-0213	50-Oa-E1-1	SBW	Prehistoric	TBD	TBD
08-5444	SCS 70	SBW	Prehistoric	TBD	TBD
08-7360	DPW-035	SBW	Prehistoric	TBD	TBD
08-7361	DPW-038	SBW	Prehistoric	TBD	TBD
08-9516	50-Oa-E1-3	SBW	Prehistoric	TBD	TBD
08-9527	50-Oa-E1-8	SBW	Prehistoric	TBD	TBD
CSH-012012-1	CSH-012012-1	SBW	Prehistoric	TBD	TBD
04-0217	50-Oa-E1-6	SBW	Prehistoric	TBD	TBD
04-5502		SBW	Historic	TBD	TBD
04-5503		SBW	Historic	TBD	TBD
08-0212		SBW	Prehistoric	TBD	TBD
DPW-002	DPW-002	SBW	Historic	TBD	TBD
DPW-005	DPW-005	SBW	Prehistoric	TBD	TBD
DPW-036	DPW-036	SBW	Historic	TBD	TBD
DPW-037	DPW-037	SBW	Prehistoric	TBD	TBD
DPW-041	DPW 41	SBW	Prehistoric	TBD	TBD
DPW-069	DPW 69	SBW	Historic	TBD	TBD
DPW-073	DPW 73	SBW	Prehistoric	TBD	TBD
DPW-100	DPW 100	SBW	Historic	TBD	TBD
DPW-121	DPW-121	SBW	Prehistoric	TBD	TBD
DPW-122	DPW-122	SBW	Prehistoric	TBD	TBD
Site 3	Site 3	SBW	Historic	TBD	TBD
04-6690	GANDA 157	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
04-7366	GTS-05, SWCA-BAX-TS-4	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
04-7372	GTS-2225-006	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
04-7405	GTS-2225-009	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
08-7369	GT 9	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
08-7370	GT 10, GTS-2075-010	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
08-7373	GTS-04, SWCA-BAX-TS-3	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
08-7378	TS 205/GANDA 205	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 07, fea 2	CM 07, fea 2	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 08	CM 08	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 408	CM 408	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
DPW-075	DPW-075	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
203/SWCA-BAX-	BAX-TS-9	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
04-6570		SBW-BAX	Historic	determined not eligible for listing	TBD
CM 01	CM 01	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 10	CM 10	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 215	CM 215	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 218	CM 218	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 223	CM 223	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 224	CM 224	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 226	CM 226	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 227	CM 227	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 228	CM 228	SBW-BAX	TBD	determined not eligible for listing	TBD
CM 229	CM 229	SBW-BAX	TBD	determined not eligible for listing	TBD
CM 231	CM 231	SBW-BAX	TBD	determined not eligible for listing	TBD
CM 232	CM 232	SBW-BAX	TBD	determined not eligible for listing	TBD
CM 248	CM 248	SBW-BAX	TBD	determined not eligible for listing	TBD
CM 250	CM 250	SBW-BAX	TBD	determined not eligible for listing	TBD
CM 292	CM 292	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 309	CM 309	SBW-BAX	Historic	determined not eligible for listing	TBD
CM 310	CM 310	SBW-BAX	Historic	determined not eligible for listing	TBD
CM 320	CM 320	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 334	CM 334	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 340	CM 340	SBW-BAX	Prehistoric	determined not eligible for listing	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
CM 343	CM 343	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 344	CM 344	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 349	CM 349	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 354	CM 354	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 372	CM 372	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 379	CM 379	SBW-BAX	TBD	determined not eligible for listing	TBD
CM 396	CM 396	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 410	CM 410	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 411	CM 411	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 418	CM 418	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 419	CM 419	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
(Extension of	CM 446 (Extension of 6569)	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
DPW-017/T3	DPW-017/T3	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
DPW-018/T4	DPW-018/T4	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
DPW-021/T7	DPW-021/T7	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
DPW-058	DPW 58	SBW-BAX	Historic	determined not eligible for listing	TBD
DPW-059	DPW 59	SBW-BAX	Historic	determined not eligible for listing	TBD
DPW-076	DPW 76	SBW-BAX	Historic	determined not eligible for listing	TBD
DPW-077	DPW 77	SBW-BAX	Historic	determined not eligible for listing	TBD
DPW-082	DPW 82	SBW-BAX	TBD	determined not eligible for listing	TBD
DPW-093	DPW 93	SBW-BAX	TBD	determined not eligible for listing	TBD
DPW-094	DPW-094	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
DPW-107	DPW-107	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
GTS-2181-007	GTS-2181-007	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
GTS-2181-008	GTS-2181-008	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
GTS-2181-009	GTS-2181-009	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
GTS-2181-011	GTS-2181-011	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
SWCA-BAX-TS-17	SWCA-BAX-TS-17	SBW-BAX	Historic	determined not eligible for listing	TBD
201	TS 201/GANDA 201	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
202, CM 06	TS 202 / GANDA 202, CM 06	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
TS 86	TS 86	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
TS 88	TS 88	SBW-BAX	Prehistoric	determined not eligible for listing	TBD
CM 438	CM 438	SBW-BAX	Prehistoric	DNE	TBD
DPW-114	DPW-114	SBW-BAX	Historic	DNE	TBD
04-6555	GANDA 4	SBW-BAX	Prehistoric	ELIGIBLE	TBD
04-7359	fe2: GTS-2225-010	SBW-BAX	Prehistoric	ELIGIBLE	TBD
04-7358	DPW-030, SWCA-BAX-TS-7	SBW-BAX	Prehistoric	ELIGIBLE	TBD
GTS-2181-005	GTS-2181-005	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 02	CM 02	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 05	CM 05	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 329	CM 329	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 345	CM 345	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 350	CM 350	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 351	CM 351	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 353	CM 353	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 380	CM 380	SBW-BAX	TBD	ELIGIBLE	TBD
CM 385	CM 385	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 391	CM 391	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 392	CM 392	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 405	CM 405	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 435	CM 435	SBW-BAX	Prehistoric	ELIGIBLE	TBD
CM 452	CM 452	SBW-BAX	Prehistoric	ELIGIBLE	TBD
DPW-052	DPW 52	SBW-BAX	Historic	ELIGIBLE	TBD
DPW-085	DPW-085	SBW-BAX	Historic	ELIGIBLE	TBD
GTS-2181-012	GTS-2181-012	SBW-BAX	TBD	ELIGIBLE	TBD
NA	CM 397	SBW-BAX	traditional	N/A	N/A
NA	CM 398	SBW-BAX	traditional	N/A	N/A
NA	CM 399	SBW-BAX	traditional	N/A	N/A
NA	CM 400	SBW-BAX	traditional	N/A	N/A
NA	CM 401	SBW-BAX	traditional	N/A	N/A
NA	CM 402	SBW-BAX	traditional	N/A	N/A
NA	CM 403	SBW-BAX	traditional	N/A	N/A
NA	CM 404	SBW-BAX	traditional	N/A	N/A
NA	CM 406	SBW-BAX	unknown	N/A	N/A

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
NA	CM 407	SBW-BAX	unknown	N/A	N/A
NA	CM 409	SBW-BAX	US Military	N/A	N/A
NA	CM 412	SBW-BAX	traditional	N/A	N/A
NA	CM 413	SBW-BAX	traditional	N/A	N/A
NA	CM 439	SBW-BAX	traditional	N/A	N/A
NA	DPW-027	SBW-BAX	UNK	N/A	N/A
NA	GTS-2082-1	SBW-BAX	unknown	N/A	N/A
NA	CM 390	SBW-BAX	traditional	N/A	N/A
04-7356	T14	SBW-BAX	Prehistoric	NEV	TBD
DPW-048	DPW-048	SBW-BAX	Prehistoric	NEV	TBD
04-6829	GANDA 170	SBW-BAX	Prehistoric	NEV	TBD
04-7219	2&3, GTS-2181-002	SBW-BAX	Prehistoric	NEV	TBD
04-7221	GTS-2181-010, lwi 2	SBW-BAX	Prehistoric	NEV	TBD
DPW-023/T9	DPW-023/T9	SBW-BAX	Prehistoric	NEV	TBD
DPW-024/T10	DPW-024/T10	SBW-BAX	Prehistoric	NEV	TBD
DPW-046	DPW 46	SBW-BAX	Prehistoric	NEV	TBD
DPW-050	DPW-050	SBW-BAX	Prehistoric	NEV	TBD
SWCA-BAX-TS-14	(Fe.4), CM 355-358, CM 360-	SBW-BAX	Prehistoric	NEV	TBD
04-6569	GANDA 101, CM 446	SBW-BAX	Historic	NEV	TBD
CM 11	CM 11	SBW-BAX	Prehistoric	NEV	TBD
CM 172	CM 172	SBW-BAX	TBD	NEV	TBD
CM 173	CM 173	SBW-BAX	TBD	NEV	TBD
CM 212/213	CM 212/213	SBW-BAX	TBD	NEV	TBD
CM 426	CM 426	SBW-BAX	Prehistoric	NEV	TBD
CM 448	CM 448	SBW-BAX	Prehistoric	NEV	TBD
2181-015	CM 453 / GTS-2181-015	SBW-BAX	Prehistoric	NEV	TBD
DPW-015/T1	DPW-015/T1	SBW-BAX	TBD	NEV	TBD
DPW-043	DPW-043	SBW-BAX	Prehistoric	NEV	TBD
DPW-044	DPW 44	SBW-BAX	Historic	NEV	TBD
DPW-045	DPW 45	SBW-BAX	Prehistoric	NEV	TBD
DPW-049	DPW 49	SBW-BAX	Historic	NEV	TBD
DPW-054	DPW 54	SBW-BAX	TBD	NEV	TBD
DPW-086	DPW 86	SBW-BAX	Historic	NEV	TBD
GTS-2181-013	GTS-2181-013	SBW-BAX	Prehistoric	NEV	TBD
GTS-2181-014	GTS-2181-014	SBW-BAX	Prehistoric	NEV	TBD
TS 85	TS 85	SBW-BAX	Prehistoric	NEV	TBD
CM 376	CM 376	SBW-BAX	TBD	RECOMMENDNO	TBD
04-6554	GANDA 3	SBW-BAX	Prehistoric	TBD	TBD
04-6561	GANDA 13	SBW-BAX	Prehistoric	TBD	TBD
04-6565	GANDA 82-84	SBW-BAX	Prehistoric	TBD	TBD
04-6566	GANDA 85	SBW-BAX	Prehistoric	TBD	TBD
04-6691	GANDA 158	SBW-BAX	Prehistoric	TBD	TBD
04-6695	433, 6695 exp in gulch	SBW-BAX	Prehistoric	TBD	TBD
08-5381	BAX-TS-10, SWCA-BAX-TS-16	SBW-BAX	Prehistoric	TBD	TBD
CM 416	417)	SBW-BAX	Prehistoric	TBD	TBD
SWCA-BAX-TS-12	SWCA-BAX-TS-12, CM 222	SBW-BAX	Prehistoric	TBD	TBD
SWCA-BAX-TS-13	SWCA-BAX-TS-13	SBW-BAX	Prehistoric	TBD	TBD
04-7355	6,OHA Rpt. T11&12, Mark	SBW-BAX	Prehistoric	TBD	TBD
04-5513	SCS 95	SBW-BAX	Prehistoric	TBD	TBD
04-5518	SCS 100	SBW-BAX	TBD	TBD	TBD
04-6552	GANDA 1	SBW-BAX	Prehistoric	TBD	TBD
04-6557	GANDA 6, 155	SBW-BAX	Historic	TBD	TBD
04-6559	04-6832, CM 228-289, CM	SBW-BAX	Prehistoric	TBD	TBD
04-6563	GANDA 41	SBW-BAX	TBD	TBD	TBD
04-6567	GANDA 87,88,102,103	SBW-BAX	Historic	TBD	TBD
04-6685	GANDA 151, 197	SBW-BAX	TBD	TBD	TBD
04-6686	GANDA 152	SBW-BAX	Prehistoric	TBD	TBD
04-6687	301-306, 312-317)	SBW-BAX	Prehistoric	TBD	TBD
04-6689	GANDA 156	SBW-BAX	Prehistoric	TBD	TBD
04-6699	GANDA 168	SBW-BAX	Prehistoric	TBD	TBD
04-6830	GANDA 171	SBW-BAX	Prehistoric	TBD	TBD
04-6832	GANDA 180	SBW-BAX	Prehistoric	TBD	TBD
04-6834	331-339	SBW-BAX	Prehistoric	TBD	TBD
04-6838	GANDA 186	SBW-BAX	Prehistoric	TBD	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
04-6841	CM 375-389	SBW-BAX	Prehistoric	TBD	TBD
04-6843	GANDA 192, Fe. 85	SBW-BAX	Prehistoric	TBD	TBD
04-6844	GANDA 193	SBW-BAX	Prehistoric	TBD	TBD
04-6845	GANDA 194	SBW-BAX	Prehistoric	TBD	TBD
04-6846	GANDA 195, CM 221	SBW-BAX	Prehistoric	TBD	TBD
04-7216	GTS-2075-012, lwi 1	SBW-BAX	Prehistoric	TBD	TBD
04-7217	GTS-2075-013	SBW-BAX	Prehistoric	TBD	TBD
04-7218	GTS-2075-014	SBW-BAX	Prehistoric	TBD	TBD
04-7353	DPW-026 fe 3, CM 12	SBW-BAX	Prehistoric	TBD	TBD
04-7354	CM 442	SBW-BAX	Prehistoric	TBD	TBD
04-7357	DPW-029A	SBW-BAX	Historic	TBD	TBD
04-7362	DPW 42 (formerly T8)	SBW-BAX	Prehistoric	TBD	TBD
04-7371	GTS-2075-01	SBW-BAX	Prehistoric	TBD	TBD
04-7374	GTS-2225-11, GT 5	SBW-BAX	Prehistoric	TBD	TBD
04-7403	GTS-2225-001, lwi 3	SBW-BAX	Prehistoric	TBD	TBD
08-7367	GT 7	SBW-BAX	Prehistoric	TBD	TBD
08-7368	GT 8	SBW-BAX	Prehistoric	TBD	TBD
08-7404	GTS-2225-008, lwi 4	SBW-BAX	Prehistoric	TBD	TBD
CM 03	CM 03	SBW-BAX	Prehistoric	TBD	TBD
CM 414	CM 414	SBW-BAX	Prehistoric	TBD	TBD
CM 449	CM 449	SBW-BAX	Prehistoric	TBD	TBD
DPW-055	DPW 55	SBW-BAX	Prehistoric	TBD	TBD
DPW-081	DPW-081	SBW-BAX	Prehistoric	TBD	TBD
GT 1	GT 1	SBW-BAX	Historic	TBD	TBD
Boulders)	GT 2 (Piko Boulders)	SBW-BAX	Prehistoric	TBD	TBD
GTS-2181-001	GTS-2181-001	SBW-BAX	Prehistoric	TBD	TBD
GTS-2225-007	GTS-2225-007	SBW-BAX	Prehistoric	TBD	TBD
206	TS 206/GANDA 206	SBW-BAX	Prehistoric	TBD	TBD
207	TS 207/GANDA 207	SBW-BAX	Historic	TBD	TBD
208	TS 208/GANDA 208	SBW-BAX	Historic	TBD	TBD
209	TS 209/GANDA 209	SBW-BAX	Prehistoric	TBD	TBD
04-6553	GANDA 2	SBW-BAX	Historic	TBD	TBD
04-6556	GANDA 5	SBW-BAX	Historic	TBD	TBD
04-6558	GANDA 10, DPW 84	SBW-BAX	Historic	TBD	TBD
04-6560	GANDA 12	SBW-BAX	Prehistoric	TBD	TBD
04-6562	GANDA 14	SBW-BAX	Prehistoric	TBD	TBD
04-6564	GANDA 81	SBW-BAX	Prehistoric	TBD	TBD
04-6568	GANDA 99	SBW-BAX	Historic	TBD	TBD
04-6571		SBW-BAX	Historic	TBD	TBD
04-6688	GANDA 154, TS 319	SBW-BAX	Prehistoric	TBD	TBD
04-6692	GANDA 159	SBW-BAX	Historic	TBD	TBD
04-6693	GANDA 161, DPW-043	SBW-BAX	Prehistoric	TBD	TBD
04-6694	085	SBW-BAX	Historic	TBD	TBD
04-6696	GANDA 165	SBW-BAX	Prehistoric	TBD	TBD
04-6697	GANDA 166	SBW-BAX	Historic	TBD	TBD
04-6698	GANDA 167	SBW-BAX	Historic	TBD	TBD
04-6831	GANDA 175, DPW-056	SBW-BAX	Historic	TBD	TBD
04-6833	GANDA 181	SBW-BAX	Prehistoric	TBD	TBD
04-6835	GANDA 183	SBW-BAX	Prehistoric	TBD	TBD
04-6836	GANDA 184	SBW-BAX	Prehistoric	TBD	TBD
04-6837	GANDA 185	SBW-BAX	Prehistoric	TBD	TBD
04-6839	GANDA 188	SBW-BAX	Prehistoric	TBD	TBD
04-6840	GANDA 189	SBW-BAX	Prehistoric	TBD	TBD
04-6842	GANDA 191	SBW-BAX	Prehistoric	TBD	TBD
04-7220	GTS-2181-006	SBW-BAX	Historic	TBD	TBD
08-5512	SCS 94, GANDA 162	SBW-BAX	Historic	TBD	TBD
08-7377	TS 200/ GANDA 200	SBW-BAX	Historic	TBD	TBD
CM 04	CM 04	SBW-BAX	Prehistoric	TBD	TBD
CM 09	CM 09	SBW-BAX	Prehistoric	TBD	TBD
CM 211, CM 112	CM 211, CM 112	SBW-BAX	Prehistoric	TBD	TBD
CM 212	CM 212	SBW-BAX	Prehistoric	TBD	TBD
CM 214	CM 214	SBW-BAX	Prehistoric	TBD	TBD
CM 216	CM 216	SBW-BAX	TBD	TBD	TBD
CM 217	CM 217	SBW-BAX	Prehistoric	TBD	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
CM 219	CM 219	SBW-BAX	Prehistoric	TBD	TBD
CM 220	CM 220	SBW-BAX	Prehistoric	TBD	TBD
CM 222	CM 222	SBW-BAX	Prehistoric	TBD	TBD
CM 225	CM 225	SBW-BAX	Prehistoric	TBD	TBD
CM 252	CM 252	SBW-BAX	TBD	TBD	TBD
CM 254	CM 254	SBW-BAX	TBD	TBD	TBD
CM 255	CM 255, DPW 80, DPW 82	SBW-BAX	Historic	TBD	TBD
CM 262	CM 262	SBW-BAX	TBD	TBD	TBD
CM 267	CM 267	SBW-BAX	TBD	TBD	TBD
CM 269	CM 269	SBW-BAX	TBD	TBD	TBD
CM 271	CM 271	SBW-BAX	TBD	TBD	TBD
CM 277	CM 277	SBW-BAX	TBD	TBD	TBD
CM 278	CM 278	SBW-BAX	TBD	TBD	TBD
CM 282	CM 282	SBW-BAX	TBD	TBD	TBD
CM 283	CM 283	SBW-BAX	TBD	TBD	TBD
CM 285	CM 285	SBW-BAX	TBD	TBD	TBD
CM 287	CM 287	SBW-BAX	Prehistoric	TBD	TBD
CM 293	CM 293	SBW-BAX	Prehistoric	TBD	TBD
CM 294	CM 294	SBW-BAX	Prehistoric	TBD	TBD
CM 296	CM 296	SBW-BAX	TBD	TBD	TBD
CM 297	CM 297	SBW-BAX	Prehistoric	TBD	TBD
CM 299	CM 299	SBW-BAX	Prehistoric	TBD	TBD
CM 302	CM 302	SBW-BAX	Prehistoric	TBD	TBD
CM 303	CM 303	SBW-BAX	Prehistoric	TBD	TBD
CM 304	CM 304	SBW-BAX	Prehistoric	TBD	TBD
CM 308	CM 308	SBW-BAX	Prehistoric	TBD	TBD
CM 311	CM 311	SBW-BAX	Prehistoric	TBD	TBD
CM 313	CM 313	SBW-BAX	Prehistoric	TBD	TBD
CM 314	CM 314	SBW-BAX	Prehistoric	TBD	TBD
CM 315	CM 315	SBW-BAX	Prehistoric	TBD	TBD
CM 316	CM 316	SBW-BAX	Prehistoric	TBD	TBD
CM 317	CM 317	SBW-BAX	Prehistoric	TBD	TBD
CM 318	CM 318	SBW-BAX	Prehistoric	TBD	TBD
CM 321	CM 321	SBW-BAX	Prehistoric	TBD	TBD
CM 323	CM 323	SBW-BAX	Prehistoric	TBD	TBD
CM 324	CM 324	SBW-BAX	Prehistoric	TBD	TBD
CM 325	CM 325	SBW-BAX	Prehistoric	TBD	TBD
CM 326	CM 326	SBW-BAX	Prehistoric	TBD	TBD
CM 327	CM 327	SBW-BAX	Historic	TBD	TBD
CM 328	CM 328	SBW-BAX	Prehistoric	TBD	TBD
CM 331	CM 331	SBW-BAX	Prehistoric	TBD	TBD
CM 332	CM 332	SBW-BAX	Prehistoric	TBD	TBD
CM 336	CM 336	SBW-BAX	Prehistoric	TBD	TBD
CM 341	CM 341	SBW-BAX	Prehistoric	TBD	TBD
CM 342	CM 342	SBW-BAX	Prehistoric	TBD	TBD
CM 346	CM 346	SBW-BAX	Prehistoric	TBD	TBD
CM 347	CM 347	SBW-BAX	Prehistoric	TBD	TBD
CM 348	CM 348	SBW-BAX	Prehistoric	TBD	TBD
CM 352	CM 352	SBW-BAX	Prehistoric	TBD	TBD
CM 355	CM 355	SBW-BAX	Prehistoric	TBD	TBD
CM 356	CM 356	SBW-BAX	Prehistoric	TBD	TBD
CM 363	CM 363	SBW-BAX	Prehistoric	TBD	TBD
CM 374	CM 374	SBW-BAX	Prehistoric	TBD	TBD
CM 378	CM 378	SBW-BAX	TBD	TBD	TBD
CM 382	CM 382	SBW-BAX	TBD	TBD	TBD
CM 383	CM 383	SBW-BAX	Prehistoric	TBD	TBD
CM 384	CM 384	SBW-BAX	Prehistoric	TBD	TBD
CM 386	CM 386	SBW-BAX	TBD	TBD	TBD
CM 387	CM 387	SBW-BAX	TBD	TBD	TBD
CM 388	CM 388	SBW-BAX	TBD	TBD	TBD
CM 389	CM 389	SBW-BAX	TBD	TBD	TBD
CM 393	CM 393	SBW-BAX	Prehistoric	TBD	TBD
CM 394	CM 394	SBW-BAX	Prehistoric	TBD	TBD
CM 423	CM 423	SBW-BAX	Prehistoric	TBD	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
CM 424	CM 424	SBW-BAX	Prehistoric	TBD	TBD
CM 425	CM 425	SBW-BAX	Prehistoric	TBD	TBD
CM 427	CM 427	SBW-BAX	Prehistoric	TBD	TBD
CM 428	CM 428	SBW-BAX	Prehistoric	TBD	TBD
CM 429	CM 429	SBW-BAX	Prehistoric	TBD	TBD
CM 431	CM 431	SBW-BAX	Prehistoric	TBD	TBD
CM 434	CM 434	SBW-BAX	Prehistoric	TBD	TBD
CM 436	CM 436	SBW-BAX	Prehistoric	TBD	TBD
CM 437	CM 437	SBW-BAX	Prehistoric	TBD	TBD
CM 440	CM 440	SBW-BAX	Prehistoric	TBD	TBD
CM 443	CM 443	SBW-BAX	TBD	TBD	TBD
CM 447	CM 447	SBW-BAX	Prehistoric	TBD	TBD
CM 451	CM 451	SBW-BAX	Prehistoric	TBD	TBD
DPW-016/T2	DPW-016/T2	SBW-BAX	Prehistoric	TBD	TBD
DPW-019/T5	DPW-019/T5	SBW-BAX	Prehistoric	TBD	TBD
DPW-022/TS8	DPW-022/TS8	SBW-BAX	Prehistoric	TBD	TBD
DPW-047	DPW 47	SBW-BAX	Historic	TBD	TBD
DPW-051	DPW 51	SBW-BAX	Prehistoric	TBD	TBD
DPW-080	DPW 80	SBW-BAX	TBD	TBD	TBD
DPW-111	DPW-111	SBW-BAX	Historic	TBD	TBD
DPW-112	DPW-112	SBW-BAX	Historic	TBD	TBD
DPW-115	DPW-115	SBW-BAX	Historic	TBD	TBD
GT 3	GT 3	SBW-BAX	Prehistoric	TBD	TBD
GTS-2075-015	GTS-2075-015	SBW-BAX	Historic	TBD	TBD
GTS-2181-015	GTS-2181-015	SBW-BAX	Prehistoric	TBD	TBD
GTS-2181-016	GTS-2181-016	SBW-BAX	TBD	TBD	TBD
GTS-2225-002	GTS-2225-002	SBW-BAX	Prehistoric	TBD	TBD
GTS-2225-003	GTS-2225-003	SBW-BAX	Historic	TBD	TBD
GTS-2225-004	GTS-2225-004	SBW-BAX	Prehistoric	TBD	TBD
GTS-2225-005	GTS-2225-005	SBW-BAX	Prehistoric	TBD	TBD
GT 6/DPW 61	61	SBW-BAX	Historic	TBD	TBD
/ 5381 & 6561 exp	SWCA-BAX-TS-10 / 5381 exp	SBW-BAX	Prehistoric	TBD	TBD
/ 5381 & 6561 exp	6561 exp	SBW-BAX	Historic	TBD	TBD
(GANDA 216)	216)	SBW-BAX	Historic	TBD	TBD
/ 5381 & 6561 exp	6561 exp	SBW-BAX	Prehistoric	TBD	TBD
SWCA-BAX-TS-18	SWCA-BAX-TS-18	SBW-BAX	Historic	TBD	TBD
9/T203 exp	SWCA-BAX-TS-9/T203 exp	SBW-BAX	Prehistoric	TBD	TBD
TS 84	TS 84	SBW-BAX	Prehistoric	TBD	TBD
CM 417	416)	SBW-BAX	Prehistoric	to be determined	TBD
CM 415	CM 415	SBW-BAX	Prehistoric	to be determined	TBD
DPW-020/T6	DPW-020/T6	SBW-BAX	Prehistoric	to be determined	TBD
TS 208 expansion	TS 208 expansion	SBW-BAX	Prehistoric	to be determined	TBD
CM 251	CM 251	SBW-BAX	TBD	to be determined	TBD
CM 290	CM 290	SBW-BAX	TBD	to be determined	TBD
CM 306	CM 306	SBW-BAX	Prehistoric	to be determined	TBD
CM 307	CM 307, TS 307	SBW-BAX	Prehistoric	to be determined	TBD
CM 364	CM 364	SBW-BAX	Prehistoric	to be determined	TBD
CM 365	CM 365	SBW-BAX	Prehistoric	to be determined	TBD
CM 370	CM 370	SBW-BAX	Prehistoric	to be determined	TBD
CM 371	CM 371	SBW-BAX	Prehistoric	to be determined	TBD
CM 373	CM 373	SBW-BAX	Prehistoric	to be determined	TBD
CM 395	CM 395	SBW-BAX	Prehistoric	to be determined	TBD
CM 420	CM 420	SBW-BAX	Prehistoric	to be determined	TBD
CM 421	CM 421	SBW-BAX	Prehistoric	to be determined	TBD
CM 422	CM 422	SBW-BAX	Prehistoric	to be determined	TBD
CM 430	CM 430	SBW-BAX	Prehistoric	to be determined	TBD
CM 441	CM 441	SBW-BAX	Prehistoric	to be determined	TBD
CM 444	CM 444	SBW-BAX	Historic	to be determined	TBD
CM 445	CM 445	SBW-BAX	Historic	to be determined	TBD
CM 450	CM 450	SBW-BAX	TBD	to be determined	TBD
CSH-112311-1	CSH-112311-1	SBW-BAX	Prehistoric	to be determined	TBD
DPW-053	DPW 53	SBW-BAX	Historic	to be determined	TBD
DPW-057	DPW 57	SBW-BAX	Historic	to be determined	TBD
DPW-079	DPW 79	SBW-BAX	Historic	to be determined	TBD

Current Name	Temp Site ID	Sub-Installation	Age Affiliation	NRHP Status	HistoricStatusCode
DPW-105	DPW-105	SBW-BAX	Historic	to be determined	TBD
DPW-106	DPW-106	SBW-BAX	Historic	to be determined	TBD
DPW-108	DPW-108	SBW-BAX	Historic	to be determined	TBD
DPW-113	DPW-113	SBW-BAX	Historic	to be determined	TBD
14-9504	50-Oa-A7-80	TMC	Prehistoric	TBD	TBD
14-9505	50-Oa-A7-81	TMC	Prehistoric	TBD	TBD
08-1385	NRHP 2005	WAA	Historic	TBD	TBD
08-6872	DPW-007	WAA	Historic	TBD	TBD
08-6759	DPW-001	WAA	Prehistoric	TBD	TBD
DPW-003	DPW-003	WAA	Historic	TBD	TBD
DPW-008	DPW-008	WAA	Prehistoric	TBD	TBD
DPW-009	DPW-009	WAA	Historic	TBD	TBD
DPW-010	DPW-010	WAA	Historic	TBD	TBD
DPW-011	DPW-011	WAA	Historic	TBD	TBD
Structure # 1414	NONE-06, Structure # 1414	WAA	Historic	TBD	TBD
SCS-WAA-TS-1	SCS-WAA-TS-1	WAA	Historic	TBD	TBD
SCS-WAA-TS-2	SCS-WAA-TS-2	WAA	Historic	TBD	TBD
SCS-WAA-TS-3	SCS-WAA-TS-3	WAA	Historic	TBD	TBD

APPENDIX D.2: USAG-HI Historic Facilities with Active Historic Status Code

USAG-HI Facilities 1901-1967
Real Property Planning and Analysis System (RPLANS)
 Headquarters Installation Information System (HQIIS) physical_legal report, 20-December-2016

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Fort De Russy	32	1-Jul-11	1-Jul-11	BATTERY RANDOLPH-ARMY MUSEUM	Building	FEE	NRLI
Fort Shafter	10	1-Jul-07	1-Jul-07	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	11	1-Jul-07	1-Jul-07	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	111	1-Jul-07	1-Jul-07	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	112	1-Jul-07	1-Jul-07	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	115	1-Jul-07	1-Jul-07	ECHELONS ABOVE BDE, C2F	Building	FEE	NHLC
Fort Shafter	116	1-Jul-07	1-Jul-07	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	117	1-Jul-07	1-Jul-07	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	118	1-Jul-07	1-Jul-07	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	12	1-Jul-07	1-Jul-07	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	126	1-Jul-07	1-Jul-07	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	14	1-Jul-07	1-Jul-07	FH COL QTRS	Building	MHPI	NHLC
Fort Shafter	16	1-Jul-07	1-Jul-07	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	3	1-Jul-07	1-Jul-07	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	4	1-Jul-07	1-Jul-07	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	6	1-Jul-07	1-Jul-07	FH COL QTRS	Building	MHPI	NHLC
Fort Shafter	7	1-Jul-07	1-Jul-07	FH COL QTRS	Building	MHPI	NHLC
Fort Shafter	8	1-Jul-07	1-Jul-07	FH GENERAL QTRS	Building	MHPI	NHLC
Fort Shafter	9	1-Jul-07	1-Jul-07	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	130	1-Jul-08	1-Jul-08	FLAGPOLE	Structure	FEE	NHLC
Fort Shafter	121	1-Jul-09	1-Jul-09	BN HQ BLDG	Building	FEE	NHLC
Fort Shafter	122	1-Jul-09	1-Jul-09	14190 - ECHELON ABOVE BDE	Building	FEE	NHLC
Fort Shafter	123	1-Jul-09	1-Jul-09	ADMIN GEN PURPOSE	Building	FEE	NHLC
Fort Shafter	127	1-Jul-09	1-Jul-09	ADMIN GEN PURPOSE	Building	FEE	NHLC
Fort Shafter	128	1-Jul-09	1-Jul-09	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	15	1-Jul-09	1-Jul-09	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	17	1-Jul-09	1-Jul-09	-	Building	MHPI	NHLC
Fort Shafter	5	1-Jul-09	1-Jul-09	FH GENERAL OFFICER QTRS	Building	MHPI	NHLC
Fort Shafter	214	1-Jul-10	1-Jul-10	ADMIN GEN PURPOSE	Building	FEE	NREI
Fort Shafter	509	1-Jul-16	1-Jul-16	WTR SUP/TRT BLDG	Building	FEE	NREI
Fort Shafter	334	1-Jul-17	1-Jul-17	ADMIN GENERAL PURPOSE	Building	FEE	NREC
Fort Shafter	339	1-Jul-17	1-Jul-17	DENTAL CLINIC / TROOP	Building	FEE	NREC
Fort Shafter	341	1-Jul-17	1-Jul-17	EXCHANGE MAINTENANCE SHOP	Building	FEE	NREC
Fort Shafter	342	1-Jul-17	1-Jul-17	THRIFT SHOP	Building	FEE	NREC
Fort Shafter	343	1-Jul-17	1-Jul-17	ADMIN GENERAL PURPOSE	Building	FEE	NREC
Fort Shafter	347	1-Jul-17	1-Jul-17	ENGINEERING/HOUSING MAINTENANCE	Building	FEE	NREC
Fort Shafter	434	1-Jul-17	1-Jul-17	ENGINEERING/HOUSING MAINTENANCE	Building	FEE	NREC
Fort Shafter	435	1-Jul-17	1-Jul-17	COL WILLYS EDWARD LORD VTF	Building	FEE	NREC
Fort Shafter	438	1-Jul-17	1-Jul-17	ADMIN GEN PURPOSE	Building	FEE	NREC
Fort Shafter	441	1-Jul-17	1-Jul-17	ADMIN GENERAL PURPOSE	Building	FEE	NREC
Fort Shafter	443	1-Jul-17	1-Jul-17	REC SPT FAC	Building	FEE	NREC
Fort Shafter	18	1-Jul-24	1-Jul-24	-	Building	MHPI	NHLC
Fort Shafter	320	1-Jul-25	1-Jul-25	ADMIN GENERAL PURPOSE	Building	FEE	NREI
Fort Shafter	1208	1-Jul-34	1-Jul-34	AIR/FALOUT SHEL	Building	FEE	NREI
Fort Shafter	336	1-Jul-39	1-Jul-39	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NREC
Fort Shafter	340	1-Jul-39	1-Jul-39	EXCHANGE WAREHOUSE	Building	FEE	NREC
Fort Shafter	220	1-Jul-40	1-Jul-40	INFORMATION PROCESSING CENTER	Building	FEE	NREI
Fort Shafter	335	1-Jul-42	1-Jul-42	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NREC
Fort Shafter	1292	1-Jul-42	1-Jul-42	UNDERGROUND ADMINISTRATIVE	Building	FEE	NREI
Fort Shafter	113	1-Jul-43	1-Jul-43	COMMUNICATIONS CENTER	Building	FEE	NHLC
Fort Shafter	330	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NREC
Fort Shafter	223	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NREI
Fort Shafter	40	1-Jul-44	1-Jul-44	-	Structure	PRIV	DNE
Fort Shafter	530	1-Jul-44	1-Jul-44	COURT AREA	Structure	FEE	DNE
Fort Shafter	100	1-Jul-44	1-Jul-44	ECHELONS ABOVE BDE, C2F	Building	FEE	NHLC
Fort Shafter	101	1-Jul-44	1-Jul-44	14190-ECHELONS ABOVE BDE, C2F	Building	FEE	NHLC
Fort Shafter	102	1-Jul-44	1-Jul-44	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	104	1-Jul-44	1-Jul-44	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Fort Shafter	337	1-Jul-44	1-Jul-44	SKILL DEVELOPMENT CENTER, NON-	Building	FEE	NREC
Fort Shafter	405	1-Jul-44	1-Jul-44	VEHICLE MAINTENANCE SHOP	Building	FEE	NREC
Fort Shafter	436	1-Jul-44	1-Jul-44	ORG STR BLDG	Building	FEE	NREC
Fort Shafter	448	1-Jul-44	1-Jul-44	ORG STR BLDG	Building	FEE	NREC
Fort Shafter	103	1-Jul-45	1-Jul-45	COMMUNICATION CENTER	Building	FEE	NHLC
Fort Shafter	505	1-Jul-45	1-Jul-45	ADMIN GEN PURPOSE	Building	FEE	NREI
Fort Shafter	333	1-Jul-47	1-Jul-47	REST SHED	Structure	FEE	NCE
Fort Shafter	131	1-Jul-47	1-Jul-47	MONUMENTS/MEMORIALS	Structure	FEE	NHLC
Fort Shafter	227	1-Jul-48	1-Jul-48	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	DNE
Fort Shafter	507	1-Jul-48	1-Jul-48	STORAGE SHED GENERAL PURPOSE	Structure	FEE	DNE
Fort Shafter	500	1-Jul-48	1-Jul-48	RICHARDSON THEATER	Building	FEE	NREI
Fort Shafter	520	1-Jul-48	1-Jul-48	ADMIN GEN PURPOSE	Building	FEE	NREI
Fort Shafter	525	1-Jul-48	1-Jul-48	ADMIN GENERAL PURPOSE	Building	FEE	NREI
Fort Shafter	522	1-Jul-50	1-Jul-50	COURT AREA	Structure	FEE	DNE
Fort Shafter	526	1-Jul-50	1-Jul-50	COURT AREA	Structure	FEE	DNE

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Fort Shafter	442	1-Jul-50	1-Jul-50	ADMIN GEN PURPOSE	Building	FEE	NREC
Fort Shafter	719	1-Jul-58	1-Jul-58	DVQ	Building	PRIV	DNE
Fort Shafter	344	1-Jul-58	1-Jul-58	ADMIN GENERAL PURPOSE	Building	FEE	NREI
Fort Shafter	345	1-Jul-58	1-Jul-58	ENGINEERING/HOUSING MAINTENANCE	Building	FEE	NREI
Fort Shafter	346	1-Jul-58	1-Jul-58	ENGINEERING/HOUSING MAINTENANCE	Building	FEE	NREI
Fort Shafter	515	1-Jul-59	1-Jul-59	COMPANY HEADQUARTERS BUILDING	Building	FEE	ELPA
Fort Shafter	322	1-Jul-61	1-Jul-61	ENGINEERING/HOUSING MAINTENANCE	Building	FEE	DNE
Fort Shafter	1301	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1303	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1304	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1305	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1307	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1309	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1311	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1312	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1313	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1314	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1315	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1317	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1319	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1320	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1321	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1323	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1325	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1327	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1328	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1329	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1331	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1333	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1335	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1340	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1342	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1343	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1344	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1345	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1346	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1347	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1348	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1350	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1352	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	1354	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	830	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	832	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	834	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	835	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	836	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	837	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	838	1-Jul-61	1-Jul-61	-	Building	MHPI	ELPA
Fort Shafter	404	1-Jul-61	1-Jul-61	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NCE
Helemano Military Reservation	300	1-Jul-51	1-Jul-51	-	Building	FEE	DNE
Helemano Military Reservation	303	1-Jul-66	1-Jul-66	-	Building	FEE	ELPA
Kahuku Tng Area	5	1-Jul-44	1-Jul-44	-	Structure	OTHR	NREC
Kahuku Tng Area	1	1-Jul-61	1-Jul-61	-	Building	FEE	NREC
Kahuku Tng Area	13	1-Jul-61	1-Jul-61	-	Building	FEE	NREC
Kahuku Tng Area	14	1-Jul-61	1-Jul-61	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kahuku Tng Area	18	1-Jul-61	1-Jul-61	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kahuku Tng Area	20	1-Jul-61	1-Jul-61	ACCESS CONTROL FACILITY	Building	FEE	NREC
Kahuku Tng Area	27	1-Jul-61	1-Jul-61	PROTECTIVE BARRIER	Structure	FEE	NREC
Kahuku Tng Area	28	1-Jul-61	1-Jul-61	ACCESS CONTROL FACILITY	Building	FEE	NREC
Kahuku Tng Area	36	1-Jul-61	1-Jul-61	PROTECTIVE BARRIER	Structure	FEE	NREC
Kahuku Tng Area	4	1-Jul-61	1-Jul-61	-	Building	FEE	NREC
Kahuku Tng Area	45	1-Jul-61	1-Jul-61	RANGE SUPPORT FACILITY	Building	FEE	NREC
Kahuku Tng Area	60	1-Jul-61	1-Jul-61	ACCESS CONTROL FACILITY	Building	FEE	NREC
Kahuku Tng Area	63	1-Jul-61	1-Jul-61	RANGE SUPPORT FACILITY	Building	FEE	NREC
Kahuku Tng Area	64	1-Jul-61	1-Jul-61	FLAGPOLE	Structure	FEE	NREC
Kahuku Tng Area	67	1-Jul-61	1-Jul-61	RANGE SUPPORT FACILITY	Building	FEE	NREC
Kahuku Tng Area	80	1-Jul-61	1-Jul-61	-	Building	FEE	NREC
Kahuku Tng Area	N0005	1-Jul-61	1-Jul-61	RANGE SUPPORT FACILITY	Building	FEE	NREC
Kahuku Tng Area	22	1-Jul-61	1-Jul-61	PROTECTIVE BARRIER	Structure	FEE	NREI
Kahuku Tng Area	37	1-Jul-61	1-Jul-61	-	Building	FEE	NREI
Kahuku Tng Area	47	1-Jul-61	1-Jul-61	POWER PLANT BLDG	Building	FEE	NREI
Kahuku Tng Area	70	18-Apr-63	18-Apr-63	STORAGE BUILDING, GENERAL PURPOSE	Building	FEE	NREC
Kahuku Tng Area	84	1-Jul-63	1-Jul-63	RANGE SUPPORT FACILITY	Building	FEE	NREC
Kipapa Ammo Storage Site	0022A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0024B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0026A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0026B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0027A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Kipapa Ammo Storage Site	0027B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0028A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0029A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0029B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0030A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0030B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0031A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	0031B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	1	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	10	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	11	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	12	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	13	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	14	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	15	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	16	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	17	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	18	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	19	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	2	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	20	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kipapa Ammo Storage Site	21	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	22	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	23	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	24	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	25	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	26	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	27	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	28	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	29	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	3	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	30	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	31	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	32	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	33	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	34	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	35	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	36	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	37	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	38	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	39	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	4	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	40	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	41	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	42	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	43	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	44	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	45	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	46	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	47	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	48	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	49	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	5	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	50	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	51	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	52	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	53	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	54	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	6	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	7	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	9	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	A0001	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Kipapa Ammo Storage Site	B0002	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Schofield Barracks Military Reservation	156	1-Jul-14	1-Jul-14	BARRACKS - CURRENTLY UNDER WBR	Building	FEE	NRLC
Schofield Barracks Military Reservation	158	1-Jul-14	1-Jul-14	BARRACKS - CURRENTLY UNDER WBR	Building	FEE	NRLC
Schofield Barracks Military Reservation	356	1-Jul-15	1-Jul-15	ENLISTED UPH	Building	FEE	NRLC
Schofield Barracks Military Reservation	358	1-Jul-15	1-Jul-15	ENLISTED UPH	Building	FEE	NRLC
Schofield Barracks Military Reservation	361	1-Jul-15	1-Jul-15	CARTER HALL	Building	FEE	NRLC
Schofield Barracks Military Reservation	355	1-Jul-16	1-Jul-16	COMPANY HQ BLDG	Building	FEE	NRLC
Schofield Barracks Military Reservation	357	1-Jul-16	1-Jul-16	BN HQ / DINING FACILITIES	Building	FEE	NRLC
Schofield Barracks Military Reservation	155	1-Jul-18	1-Jul-18	CO HQ BLDG	Building	FEE	NRLC
Schofield Barracks Military Reservation	157	1-Jul-18	1-Jul-18	BARRACKS - CURRENTLY UNDER WBR	Building	FEE	NRLC
Schofield Barracks Military Reservation	225	1-Jul-18	1-Jul-18	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	227	1-Jul-18	1-Jul-18	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	229	1-Jul-18	1-Jul-18	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	A0227	1-Jul-18	1-Jul-18	GARAGE - ORIGINAL CARRIAGE HOUSE	Structure	PRIV	NRLC
Schofield Barracks Military Reservation	3010	1-Jul-18	1-Jul-18	ADMIN GEN PURPOSE - POLICE/MP	Building	FEE	NRLI
Schofield Barracks Military Reservation	401	1-Jul-19	1-Jul-19	-	Building	MHPI	NRLC

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Schofield Barracks Military Reservation	423	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	424	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	425	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	426	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	427	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	428	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	429	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	430	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	431	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	432	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	433	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	435	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	437	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	439	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	441	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	443	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	445	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	447	1-Jul-21	1-Jul-21	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	449	1-Jul-21	1-Jul-21	COMPANY HQ	Building	FEE	NRLC
Schofield Barracks Military Reservation	450	1-Jul-21	1-Jul-21	UPH BARRACKS	Building	FEE	NRLC
Schofield Barracks Military Reservation	451	1-Jul-21	1-Jul-21	UPH BARRACKS	Building	FEE	NRLC
Schofield Barracks Military Reservation	452	1-Jul-21	1-Jul-21	ENLISTED UPH	Building	FEE	NRLC
Schofield Barracks Military Reservation	434	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	436	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	438	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	440	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	442	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	444	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	446	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	448	1-Jul-22	1-Jul-22	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	2026	1-Jul-23	1-Jul-23	ADMIN GEN PURPOSE	Building	FEE	DNE
Schofield Barracks Military Reservation	494	1-Jul-24	1-Jul-24	ADMIN GEN PURPOSE	Building	FEE	NREI
Schofield Barracks Military Reservation	750	1-Jul-26	1-Jul-26	ADMIN GEN PURP - DHR	Building	FEE	NRLC
Schofield Barracks Military Reservation	689	1-Jul-28	1-Jul-28	CO HQ BLDG	Building	FEE	NCE
Schofield Barracks Military Reservation	409	1-Jul-28	1-Jul-28	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	509	1-Jul-28	1-Jul-28	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	672	1-Jul-28	1-Jul-28	SOLDIER & FAMILY ASSISTANCE CENTER	Building	FEE	NRLC
Schofield Barracks Military Reservation	673	1-Jul-28	1-Jul-28	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	677	1-Jul-28	1-Jul-28	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	680	1-Jul-28	1-Jul-28	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	681	1-Jul-28	1-Jul-28	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	682	1-Jul-28	1-Jul-28	-	Building	FEE	NRLC
Schofield Barracks Military Reservation	686	1-Jul-28	1-Jul-28	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	687	1-Jul-28	1-Jul-28	HEALTH CLINIC / ENLISTED UPH	Building	FEE	NRLC
Schofield Barracks Military Reservation	688	1-Jul-28	1-Jul-28	HQ BLDG WTU	Building	FEE	NRLC
Schofield Barracks Military Reservation	676	1-Jul-29	1-Jul-29	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	678	1-Jul-29	1-Jul-29	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	683	1-Jul-29	1-Jul-29	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	684	1-Jul-29	1-Jul-29	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	685	1-Jul-29	1-Jul-29	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	690	1-Jul-29	1-Jul-29	Renovation - ADMIN GEN PURPOSE	Building	FEE	NRLC
Schofield Barracks Military Reservation	691	1-Jul-29	1-Jul-29	HEALTH CLINIC	Building	FEE	NRLC
Schofield Barracks Military Reservation	692	1-Jul-29	1-Jul-29	GRANT HALL	Building	FEE	NRLC
Schofield Barracks Military Reservation	695	1-Jul-29	1-Jul-29	PHARMACY BLDG	Building	FEE	NRLC
Schofield Barracks Military Reservation	649	1-Jul-31	1-Jul-31	F QUAD - BDE HQ	Building	FEE	NRLC
Schofield Barracks Military Reservation	650	1-Jul-31	1-Jul-31	DINING FACILITY / BN HQ	Building	FEE	NRLC
Schofield Barracks Military Reservation	651	1-Jul-31	1-Jul-31	F QUAD - ENLISTED UPH / CO HQ	Building	FEE	NRLC
Schofield Barracks Military Reservation	652	1-Jul-31	1-Jul-31	F QUAD - ENLISTED UPH / CO HQ	Building	FEE	NRLC
Schofield Barracks Military Reservation	49	1-Jul-32	1-Jul-32	FH SR NCO	Building	MHPI	NREI
Schofield Barracks Military Reservation	50	1-Jul-32	1-Jul-32	FH SR NCO	Building	MHPI	NREI
Schofield Barracks Military Reservation	51	1-Jul-32	1-Jul-32	FH SR NCO	Building	MHPI	NREI
Schofield Barracks Military Reservation	52	1-Jul-32	1-Jul-32	FH SR NCO	Building	MHPI	NREI
Schofield Barracks Military Reservation	53	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	54	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	55	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	56	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	57	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	58	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	59	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	60	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	61	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	62	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	63	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	633	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	64	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	65	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	66	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	71	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Schofield Barracks Military Reservation	72	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	73	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	74	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	75	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Schofield Barracks Military Reservation	481	1-Jul-32	1-Jul-32	MACOMB GATE 1	Building	FEE	NRLC
Schofield Barracks Military Reservation	555	1-Jul-32	1-Jul-32	CONROY BOWL	Structure	FEE	NRLC
Schofield Barracks Military Reservation	600	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	601	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	602	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	603	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	604	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	605	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	606	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	607	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	608	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	609	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	610	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	611	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	612	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	613	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	614	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	615	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	616	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	617	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	618	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	619	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	620	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	621	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	622	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	623	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	624	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	625	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	626	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	627	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	628	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	629	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	631	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	635	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	637	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	639	1-Jul-32	1-Jul-32	-	Building	MHPI	NRLC
Schofield Barracks Military Reservation	582	1-Jul-33	1-Jul-33	-	Building	FEE	NRLC
Schofield Barracks Military Reservation	583	1-Jul-33	1-Jul-33	SGT SMITH THEATER	Building	FEE	NRLC
Schofield Barracks Military Reservation	584	1-Jul-33	1-Jul-33	ORG CLASSROOM	Building	FEE	NRLC
Schofield Barracks Military Reservation	647	1-Jul-40	1-Jul-40	ACS CENTER	Building	FEE	NCE
Schofield Barracks Military Reservation	648	1-Jul-40	1-Jul-40	ADMIN GEN PURPOSE	Building	FEE	NCE
Schofield Barracks Military Reservation	258	1-Jul-40	1-Jul-40	POST OFFICE	Building	FEE	NRLC
Schofield Barracks Military Reservation	3004	1-Jul-41	1-Jul-41	ADMIN GEN PURP	Building	FEE	NREI
Schofield Barracks Military Reservation	A0699	1-Jul-41	1-Jul-41	CREDIT UNION	Building	FEE	NREI
Schofield Barracks Military Reservation	664	1-Jul-42	1-Jul-42	ORG CLASSROOM	Building	FEE	NREI
Schofield Barracks Military Reservation	578	1-Jul-44	1-Jul-44	RICHARDSON POOL	Structure	FEE	NREI
Schofield Barracks Military Reservation	A0578	1-Jul-44	1-Jul-44	SEP TOIL/SOWER - @ RICHARDSON POOL	Building	FEE	NREI
Schofield Barracks Military Reservation	C0578	1-Jul-44	1-Jul-44	WATER SUPT / TREAT BLDG @	Building	FEE	NREI
Schofield Barracks Military Reservation	255	1-Jul-44	1-Jul-44	COMMUNICATIONS CENTER	Building	FEE	NRLC
Schofield Barracks Military Reservation	76	1-Jul-51	1-Jul-51	RALSTON FIELD	Structure	FEE	NREI
Schofield Barracks Military Reservation	72520	1-Jul-55	1-Jul-55	TENT PAD	Structure	FEE	ELPA
Schofield Barracks Military Reservation	72522	1-Jul-55	1-Jul-55	TENT PAD	Structure	FEE	ELPA
Schofield Barracks Military Reservation	72523	1-Jul-55	1-Jul-55	TENT PAD	Structure	FEE	ELPA
Schofield Barracks Military Reservation	72524	1-Jul-55	1-Jul-55	TENT PAD	Structure	FEE	ELPA
Schofield Barracks Military Reservation	72590	1-Jul-55	1-Jul-55	TENT PAD	Structure	FEE	ELPA
Schofield Barracks Military Reservation	100	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	101	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	102	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	103	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	104	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	105	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	106	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	107	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	108	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	109	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	110	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	111	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	112	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	113	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	114	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	115	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	116	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	117	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	118	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Schofield Barracks Military Reservation	119	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	121	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	200	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	201	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	202	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	210	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	211	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	212	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	300	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	301	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	302	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	303	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	304	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	305	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	306	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	307	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	308	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	309	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	310	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	312	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	314	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	315	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	316	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	317	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	318	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	319	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	320	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	321	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	322	1-Jul-58	1-Jul-58	-	Building	MHPI	ELPA
Schofield Barracks Military Reservation	B0225	1-Jul-58	1-Jul-58	-	Structure	PRIV	ELPA
Schofield Barracks Military Reservation	B0229	1-Jul-58	1-Jul-58	-	Structure	PRIV	ELPA
Schofield Barracks Military Reservation	784	1-Jul-60	1-Jul-60	-	Building	FEE	ELPA
Schofield Barracks Military Reservation	786	1-Jul-60	1-Jul-60	-	Building	FEE	ELPA
Schofield Barracks Military Reservation	788	1-Jul-60	1-Jul-60	-	Building	FEE	ELPA
Schofield Barracks Military Reservation	586	1-Jul-62	1-Jul-62	-	Building	FEE	NCE
Tripler Army Medical Center	122	1-Jul-48	1-Jul-48	GREENHOUSE	Building	FEE	NCE
Tripler Army Medical Center	1	1-Jul-48	1-Jul-48	MEDICAL CENTER	Building	FEE	NREC
Tripler Army Medical Center	101	1-Jul-48	1-Jul-48	COURT AREA	Structure	FEE	NREC
Tripler Army Medical Center	102	1-Jul-48	1-Jul-48	ACES FACILITY	Building	FEE	NREC
Tripler Army Medical Center	104	1-Jul-48	1-Jul-48	ENLISTED UPH	Building	FEE	NREC
Tripler Army Medical Center	127	1-Jul-48	1-Jul-48	ADMIN GEN PURPOSE	Building	FEE	NREC
Tripler Army Medical Center	131	1-Jul-48	1-Jul-48	BASEBALL / FOOTBALL FIELD	Structure	FEE	NREC
Tripler Army Medical Center	141	1-Jul-48	1-Jul-48	ENG / HOUSING MAINT	Building	FEE	NREC
Tripler Army Medical Center	143	1-Jul-48	1-Jul-48	ENG / HOUSING MAINT	Building	FEE	NREC
Tripler Army Medical Center	147	1-Jul-48	1-Jul-48	ENG / HOUSING MAINT	Building	FEE	NREC
Tripler Army Medical Center	153	1-Jul-48	1-Jul-48	HAZMAT STORAGE INS	Building	FEE	NREC
Tripler Army Medical Center	160	1-Jul-48	1-Jul-48	MEDICAL WHSE	Building	FEE	NREC
Tripler Army Medical Center	215	1-Jul-48	1-Jul-48	ADMIN GEN PURPOSE	Building	FEE	NREC
Tripler Army Medical Center	220	1-Jul-48	1-Jul-48	ENLISTED UPH	Building	FEE	NREC
Tripler Army Medical Center	222	1-Jul-48	1-Jul-48	ENLISTED UPH	Building	FEE	NREC
Tripler Army Medical Center	226	1-Jul-48	1-Jul-48	ADMIN GEN PURP	Building	FEE	NREC
Tripler Army Medical Center	228	1-Jul-48	1-Jul-48	ARMY LODGING / GUEST HOUSE	Building	PRIV	NREC
Tripler Army Medical Center	240	1-Jul-48	1-Jul-48	WATER PUMPING STATION	Building	FEE	NREC
Tripler Army Medical Center	3	1-Jul-48	1-Jul-48	MEDICAL CENTER	Building	FEE	NREC
Tripler Army Medical Center	300	1-Jul-48	1-Jul-48	PHSYCAL FITNESS CENTER	Building	FEE	NREC
Tripler Army Medical Center	301	1-Jul-48	1-Jul-48	OUTDOOR SWIMMING POOL	Structure	FEE	NREC
Tripler Army Medical Center	302	1-Jul-48	1-Jul-48	OUTDOOR SWIMMING POOL	Structure	FEE	NREC
Tripler Army Medical Center	320	1-Jul-48	1-Jul-48	ADMIN GEN PURPOSE	Building	FEE	NREC
Tripler Army Medical Center	40	1-Jul-48	1-Jul-48	LABORATORY	Building	FEE	NREC
Tripler Army Medical Center	5	1-Jul-48	1-Jul-48	MEDICAL CENTER/HOSP	Building	FEE	NREC
Tripler Army Medical Center	132	1-Jul-62	1-Jul-62	REC EQUIPMENT CHECKOUT	Building	FEE	NCE
Tripler Army Medical Center	128	1-Jul-67	1-Jul-67	BASEBALL DUGOUT	Structure	FEE	NCE
Waikakalaua Ammo Stor Tunnels	0001A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0001B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0002A	1-Jul-44	1-Jul-44	AIR/FALLOUT CENTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0002B	1-Jul-44	1-Jul-44	AIR/FALLOUT CENTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0003A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0003B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0005B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0006A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0006B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0007A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0007B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0008A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0008B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0009A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0009B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0010A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Waikakalaua Ammo Stor Tunnels	0010B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0011A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0011B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0012A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0012B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0013A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0013B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0014A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0014B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0015A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0015B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0016A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0016B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0017A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0017B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0018A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0019A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0020A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0021A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0022A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0023A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0025A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0026A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0027A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0028A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0029A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0030A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0031A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0032A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0033A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0034A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Waikakalaua Ammo Stor Tunnels	0035A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NREC
Wheeler Army Airfield	547	1-Jul-32	1-Jul-32	ADMIN GEN PURPOSE	Building	FEE	NCE
Wheeler Army Airfield	104	1-Jul-32	1-Jul-32	ADMIN GENERAL PURPOSE	Building	FEE	NHLC
Wheeler Army Airfield	105	1-Jul-32	1-Jul-32	ADMIN GEN PURPOSE	Building	FEE	NHLC
Wheeler Army Airfield	106	1-Jul-32	1-Jul-32	ADMIN GEN PURPOSE	Building	FEE	NHLC
Wheeler Army Airfield	107	1-Jul-32	1-Jul-32	ADMIN GEN PURP	Building	FEE	NHLC
Wheeler Army Airfield	108	1-Jul-32	1-Jul-32	ADMINISTRATIVE FACILITY GP	Building	FEE	NHLC
Wheeler Army Airfield	110	1-Jul-32	1-Jul-32	AC MAINT HANGAR	Building	FEE	NHLC
Wheeler Army Airfield	111	1-Jul-32	1-Jul-32	AC MAINT HANGAR	Building	FEE	NHLC
Wheeler Army Airfield	112	1-Jul-32	1-Jul-32	AC MAINT HANGAR	Building	FEE	NHLC
Wheeler Army Airfield	114	1-Jul-32	1-Jul-32	AC MAINT HANGAR	Building	FEE	NHLC
Wheeler Army Airfield	202	1-Jul-32	1-Jul-32	BN HQ BLDG	Building	FEE	NHLC
Wheeler Army Airfield	203	1-Jul-32	1-Jul-32	BATTALION HQ BLDG	Building	FEE	NHLC
Wheeler Army Airfield	204	1-Jul-32	1-Jul-32	ADMIN GEN PURPOSE	Building	FEE	NHLC
Wheeler Army Airfield	205	1-Jul-32	1-Jul-32	AC MAINT HANGAR	Building	FEE	NHLC
Wheeler Army Airfield	206	1-Jul-32	1-Jul-32	AC MAINT HANGAR	Building	FEE	NHLC
Wheeler Army Airfield	646	1-Jul-32	1-Jul-32	ORG STORAGE BLDG	Building	FEE	NHLC
Wheeler Army Airfield	647	1-Jul-32	1-Jul-32	RELIGIOUS EDU FACILITY	Building	FEE	NHLC
Wheeler Army Airfield	100	1-Jul-32	1-Jul-32	BRIGADE HEADQUARTERS BUILDING	Building	FEE	NREI
Wheeler Army Airfield	501	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	502	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	503	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	505	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	507	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	508	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	509	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	511	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	512	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	513	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	514	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	515	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	516	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	517	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	518	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	519	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	520	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	521	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	522	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	523	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	524	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	525	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	526	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	527	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	528	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	530	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	532	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	534	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Wheeler Army Airfield	540	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	541	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	542	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	543	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	544	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	545	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	546	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	548	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	550	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	552	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	554	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	556	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	558	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	560	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	600	1-Jul-32	1-Jul-32	BATTALION HEADQUARTERS BUILDING	Building	FEE	NREI
Wheeler Army Airfield	602	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	603	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	604	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	610	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	611	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	612	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	613	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	614	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	615	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	616	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	617	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	618	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	619	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	620	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	621	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	622	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	623	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	624	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	625	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	626	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	627	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	628	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	629	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	630	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	631	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	632	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	633	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	634	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	635	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	636	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	638	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	640	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	642	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	644	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	650	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	652	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	654	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	656	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	658	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	660	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	662	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	664	1-Jul-32	1-Jul-32	-	Building	MHPI	NREI
Wheeler Army Airfield	670	1-Jul-32	1-Jul-32	-	Structure	PRIV	NREI
Wheeler Army Airfield	671	1-Jul-32	1-Jul-32	-	Structure	PRIV	NREI
Wheeler Army Airfield	672	1-Jul-32	1-Jul-32	-	Structure	PRIV	NREI
Wheeler Army Airfield	673	1-Jul-32	1-Jul-32	-	Structure	PRIV	NREI
Wheeler Army Airfield	674	1-Jul-32	1-Jul-32	-	Structure	PRIV	NREI
Wheeler Army Airfield	675	1-Jul-32	1-Jul-32	ORG STORAGE BLDG - IPC	Building	PRIV	NREI
Wheeler Army Airfield	676	1-Jul-32	1-Jul-32	-	Building	PRIV	NREI
Wheeler Army Airfield	201	1-Jul-33	1-Jul-33	CO HQ BLDG	Building	FEE	NHLC
Wheeler Army Airfield	400	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	401	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	402	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	403	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	404	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	405	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	406	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	407	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	409	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	410	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	411	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	412	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	413	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Wheeler Army Airfield	414	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	415	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	416	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	417	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	418	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	420	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	421	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	422	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	423	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	424	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	425	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	426	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	427	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	428	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	429	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	430	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	431	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	440	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	441	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	442	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	443	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	444	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	549	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	700	1-Jul-40	1-Jul-40	FH COLONEL	Building	MHPI	NREI
Wheeler Army Airfield	701	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	702	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	703	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	704	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	705	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	706	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	707	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	708	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	709	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	710	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	711	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	712	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	713	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	714	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	715	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	716	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	717	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	718	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	719	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	720	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	721	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	722	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	724	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	725	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	726	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	727	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	728	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	729	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	730	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	731	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	732	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	733	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	734	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	735	1-Jul-40	1-Jul-40	-	Building	MHPI	NREI
Wheeler Army Airfield	102	1-Jul-41	1-Jul-41	BN & CO OPS BLDG, 25TH CAB	Building	FEE	NHLC
Wheeler Army Airfield	1511	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1512	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1513	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1514	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1521	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1522	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1523	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1524	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1525	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1531	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1532	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1533	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1534	1-Jul-43	1-Jul-43	IGLOO STR INST	Building	FEE	ELPA
Wheeler Army Airfield	1535	1-Jul-43	1-Jul-43	IGLOO STORAGE INSTALLATION	Building	FEE	ELPA
Wheeler Army Airfield	1536	1-Jul-43	1-Jul-43	IGLOO STORAGE INSTALLATION	Building	FEE	ELPA
Wheeler Army Airfield	1541	1-Jul-43	1-Jul-43	IGLOO STORAGE INSTALLATION	Building	FEE	ELPA
Wheeler Army Airfield	1542	1-Jul-43	1-Jul-43	IGLOO STORAGE INSTALLATION	Building	FEE	ELPA
Wheeler Army Airfield	1543	1-Jul-43	1-Jul-43	IGLOO STORAGE INSTALLATION	Building	FEE	ELPA
Wheeler Army Airfield	121	1-Jul-43	1-Jul-43	PRIVATE / ORG CLUB	Building	FEE	NCE

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Wheeler Army Airfield	233	1-Jul-43	1-Jul-43	CSMS / MATES	Building	FEE	NCE
Wheeler Army Airfield	300	1-Jul-43	1-Jul-43	ADMIN GEN PURPOSE	Building	FEE	NCE
Wheeler Army Airfield	113	1-Jul-43	1-Jul-43	PHYSICAL FITNESS CENTER	Building	FEE	NHLC
Wheeler Army Airfield	1600	1-Jul-43	1-Jul-43	REC SUPPORT FAC	Building	FEE	NHLC
Wheeler Army Airfield	200	1-Jul-43	1-Jul-43	FIRE STATION	Building	FEE	NHLC
Wheeler Army Airfield	207	1-Jul-43	1-Jul-43	AVIATION UNIT OPS	Building	FEE	NHLC
Wheeler Army Airfield	601	1-Jul-43	1-Jul-43	-	Building	MHPI	NREI
Wheeler Army Airfield	605	1-Jul-43	1-Jul-43	-	Building	MHPI	NREI
Wheeler Army Airfield	606	1-Jul-43	1-Jul-43	-	Building	MHPI	NREI
Wheeler Army Airfield	122	1-Jul-58	1-Jul-58	PRIVATE ORG / CLUB - YMCA	Building	FEE	NCE

APPENDIX D.3: USAG-HI Historic Facilities in Need of Evaluation (NEV)

USAG-HI Facilities 1901-1967
Real Property Planning and Analysis System (RPLANS)

Headquarters Installation Information System (HQIIS) physical_legal report, 20-December-2016

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Aliamanu Military Reservation	186	1-Jul-14	1-Jul-14	-	Building	FEE	NEV
Aliamanu Military Reservation	187	1-Jul-14	1-Jul-14	-	Structure	FEE	NEV
Aliamanu Military Reservation	A0187	1-Jul-14	1-Jul-14	OBSERV BUNKER	Structure	FEE	NEV
Aliamanu Military Reservation	B0187	1-Jul-14	1-Jul-14	OBSERV BUNKER/TOWER	Structure	FEE	NEV
Aliamanu Military Reservation	6	1-Jul-31	1-Jul-31	AIR/FALLOUT SHELTER	Building	FEE	NEV
Aliamanu Military Reservation	9	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0001	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0003	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0004	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0005	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0008	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0010	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0016	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0028	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0032	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0001	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0002	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0003	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0004	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0005	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0008	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0012	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0013	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0020	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0024	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0028	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0030	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0032	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0001	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0002	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0003	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0004	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0005	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0011	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0013	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0020	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0028	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0032	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0004	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0005	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0007	1-Jul-31	1-Jul-31	AIR/FAL OUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0010	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0012	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0020	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0030	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0032	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0004	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0005	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0008	1-Jul-31	1-Jul-31	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	34	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	35	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	36	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	40	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0018	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0021	1-Jul-36	1-Jul-36	-	Building	FEE	NEV
Aliamanu Military Reservation	A0033	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0037	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0038	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0039	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0043	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	A0044	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0017	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0019	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0029	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0031	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0033	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0037	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0038	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	B0039	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0029	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0033	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0037	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0038	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Aliamanu Military Reservation	C0039	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	C0045	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0018	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0029	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0031	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0033	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0038	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	D0039	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0019	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0027	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0029	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0033	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0037	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0038	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	E0039	1-Jul-36	1-Jul-36	AIR/FALOUT SHEL	Building	FEE	NEV
Aliamanu Military Reservation	00L02	1-Jul-37	1-Jul-03	74066 - YOUTH CENTER	Building	PRIV	NEV
Aliamanu Military Reservation	00M35	1-Jul-37	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	181	1-Jul-42	1-Jul-42	-	Structure	FEE	NEV
Aliamanu Military Reservation	182	1-Jul-42	1-Jul-42	-	Structure	FEE	NEV
Aliamanu Military Reservation	88	1-Jul-43	1-Jul-43	-	Building	FEE	NEV
Aliamanu Military Reservation	85220	1-Jul-54	1-Jul-54	-	Structure	FEE	NEV
Aliamanu Military Reservation	87150	1-Jul-57	1-Jul-57	-	Structure	FEE	NEV
Aliamanu Military Reservation	87120	1-Jul-58	1-Jul-58	-	Structure	FEE	NEV
Aliamanu Military Reservation	00K51	1-Jul-60	1-Jul-03	-	Building	PRIV	NEV
Aliamanu Military Reservation	CG028	1-Jul-60	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	1	1-Jul-65	1-Jul-03	-	Building	PRIV	NEV
Aliamanu Military Reservation	71262	1-Jul-65	22-Jun-10	COMMUNITY CENTER BLDG	Building	FEE	NEV
Aliamanu Military Reservation	71263	1-Jul-65	22-Jun-10	COUNTRY STORE BLDG	Building	PRIV	NEV
Aliamanu Military Reservation	CG009	1-Jul-65	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	CG016	1-Jul-65	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	CG020	1-Jul-65	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	CG025	1-Jul-65	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	00M31	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M32	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M33	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M34	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M36	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M37	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M38	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M41	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M42	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M43	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M44	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M45	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M46	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M47	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M48	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M72	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M73	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M74	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M76	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M77	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	00M78	1-Jul-67	1-Jul-03	-	Building	MHPI	NEV
Aliamanu Military Reservation	87290	1-Jul-67	1-Jul-67	-	Structure	FEE	NEV
Aliamanu Military Reservation	CG010	1-Jul-67	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	CG019	1-Jul-67	1-Jul-03	-	Structure	PRIV	NEV
Aliamanu Military Reservation	CG021	1-Jul-67	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	CG022	1-Jul-67	1-Jul-03	-	Structure	PRIV	NEV
Aliamanu Military Reservation	CG023	1-Jul-67	1-Jul-03	-	Structure	FEE	NEV
Aliamanu Military Reservation	71852	-	6-Mar-13	SR NCO FAMILY HOUSING UNIT	Building	MHPI	NEV
Aliamanu Military Reservation	71861	-	6-Mar-13	SR NCO FAMILY HOUSING UNIT	Building	MHPI	NEV
Dillingham Mil Res	1111B	1-Jul-42	1-Jul-42	-	Structure	FEE	NEV
Dillingham Mil Res	11201	1-Jul-42	1-Jul-42	-	Structure	FEE	NEV
Dillingham Mil Res	270	1-Jul-42	1-Jul-42	WATER SUPPORT BLDG	Building	FEE	NEV
Dillingham Mil Res	84100	1-Jul-42	1-Jul-42	-	Building	FEE	NEV
Dillingham Mil Res	85710	1-Jul-42	1-Jul-42	-	Structure	FEE	NEV
Dillingham Mil Res	265	1-Jul-59	1-Jul-59	-	Building	FEE	NEV
Dillingham Mil Res	87201	1-Jul-59	1-Jul-59	-	Structure	FEE	NEV
Dillingham Mil Res	250	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Fort De Russy	111	1-Jul-42	1-Jul-42	CHAPEL	Building	FEE	NEV
Fort De Russy	85215	1-Jul-42	1-Jul-42	-	Structure	FEE	NEV
Fort De Russy	A0060	1-Jul-49	1-Jul-49	BEACH PATIO (PERGOLA)	Structure	FEE	NEV
Fort De Russy	81230	1-Jul-55	1-Jul-55	-	Structure	FEE	NEV
Fort De Russy	87291	1-Jul-59	1-Jul-59	-	Structure	FEE	NEV
Fort De Russy	87290	1-Jul-60	1-Jul-60	-	Structure	FEE	NEV
Fort Shafter	98	1-Jul-09	1-Jul-09	PARADE/DRILL FIELD	Structure	FEE	NEV
Fort Shafter	87150	1-Jul-17	1-Jul-17	RETAINING STRUCTURE	Structure	FEE	NEV
Fort Shafter	150	1-Jul-30	1-Jul-30	RECREATION SUPPORT BUILDING	Building	FEE	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Fort Shafter	151	1-Jul-30	1-Jul-30	BASEBALL FIELD	Structure	FEE	NEV
Fort Shafter	137	1-Jul-36	1-Jul-36	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	201	1-Jul-36	1-Jul-36	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	75020	1-Jul-36	1-Jul-36	BASEBALL FIELD	Structure	FEE	NEV
Fort Shafter	75041	1-Jul-36	1-Jul-36	NAGORSKI GOLF COURSE	Structure	FEE	NEV
Fort Shafter	801	1-Jul-36	1-Jul-36	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	200	1-Jul-39	1-Jul-39	ADMIN GEN PURPOSE	Building	FEE	NEV
Fort Shafter	331	1-Jul-41	1-Jul-41	ORG STR BLDG	Building	FEE	NEV
Fort Shafter	529	1-Jul-41	1-Jul-41	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	1021	1-Jul-42	1-Jul-42	AIR RAID/FALLOUT SHELTER	Building	FEE	NEV
Fort Shafter	905	1-Jul-42	1-Jul-42	WATER SUPPLY/TREATMENT BUILDING,	Building	FEE	NEV
Fort Shafter	1046	1-Jul-43	1-Jul-43	SIMPSON TUNNEL	Building	FEE	NEV
Fort Shafter	870	1-Jul-43	1-Jul-43	-	Building	FEE	NEV
Fort Shafter	871	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	872	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	874	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	875	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	876	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	877	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	878	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	879	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	880	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	881	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	882	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	883	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	884	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	885	1-Jul-43	1-Jul-43	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	108	1-Jul-44	1-Jul-44	POWER PLANT BUILDING	Building	FEE	NEV
Fort Shafter	1507	1-Jul-44	1-Jul-44	ELECTRONICS MAINTENANCE SHOP DEPOT	Building	FEE	NEV
Fort Shafter	1511	1-Jul-44	1-Jul-44	OIL STORAGE BUILDING NON DOL/DPW	Building	FEE	NEV
Fort Shafter	750	1-Jul-44	1-Jul-44	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	1000	1-Jul-45	1-Jul-45	PATCH GATE	Building	FEE	NEV
Fort Shafter	106	1-Jul-45	1-Jul-45	MISCELLANEOUS SHED	Structure	FEE	NEV
Fort Shafter	531	1-Jul-45	1-Jul-45	TERMINAL EQUIPMENT FACILITY	Building	FEE	NEV
Fort Shafter	136	1-Jul-48	1-Jul-48	PEDESTRIAN BRIDGES	Structure	FEE	NEV
Fort Shafter	523	1-Jul-48	1-Jul-48	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	524	1-Jul-48	1-Jul-48	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	155	1-Jul-52	1-Jul-52	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Fort Shafter	6038	1-Jul-53	1-Jul-53	-	Structure	PRIV	NEV
Fort Shafter	510	1-Jul-55	1-Jul-55	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Fort Shafter	535	1-Jul-56	1-Jul-56	EXCHANGE MAINTENANCE SHOP	Building	FEE	NEV
Fort Shafter	536	1-Jul-56	1-Jul-56	EXCHANGE AUTOMOTIVE SERVICE	Building	FEE	NEV
Fort Shafter	537	1-Jul-56	1-Jul-56	EXCHANGE SERVICE OUTLET	Building	FEE	NEV
Fort Shafter	240	1-Jul-58	1-Jul-58	ACCESS CNT FAC - BUCKNER GATE	Building	FEE	NEV
Fort Shafter	420	1-Jul-58	1-Jul-58	ENGINEERING HOUSING MAINTENANCE	Building	FEE	NEV
Fort Shafter	511	1-Jul-58	1-Jul-58	WATER SUPPORT TREATMENT BUILDING	Building	FEE	NEV
Fort Shafter	717	1-Jul-58	1-Jul-58	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	718	1-Jul-58	1-Jul-58	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	518	1-Jul-59	1-Jul-59	MON/MEMORIALS	Structure	FEE	NEV
Fort Shafter	519	1-Jul-59	1-Jul-59	WTR SUP BLD NP	Building	FEE	NEV
Fort Shafter	1015	1-Jul-60	1-Jul-60	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	120	1-Jul-60	1-Jul-60	MON/MEMORIALS	Structure	FEE	NEV
Fort Shafter	1207	1-Jul-60	1-Jul-60	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	1308	1-Jul-60	1-Jul-60	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	141	1-Jul-60	1-Jul-60	FLAMMABLE MATERIAL STOREHOUSE	Building	FEE	NEV
Fort Shafter	445	1-Jul-60	1-Jul-60	PRIVATE ORGANIZATIONAL CLUB	Building	FEE	NEV
Fort Shafter	533	1-Jul-60	1-Jul-60	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	915	1-Jul-60	1-Jul-60	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	1100	1-Jul-61	1-Jul-61	WATER SUPPLY/TREATMENT PLANT	Building	FEE	NEV
Fort Shafter	1300	1-Jul-61	1-Jul-61	MON/MEMORIALS	Structure	FEE	NEV
Fort Shafter	447	1-Jul-61	1-Jul-61	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NEV
Fort Shafter	1302	1-Jul-62	1-Jul-62	MISC SHED	Structure	FEE	NEV
Fort Shafter	504	1-Jul-63	1-Jul-63	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NEV
Fort Shafter	725	1-Jul-63	1-Jul-63	GOLF COURSE MAINTENANCE BUILDING	Building	FEE	NEV
Fort Shafter	A0509	1-Jul-63	1-Jul-63	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NEV
Fort Shafter	29	1-Jul-64	1-Jul-64	-	Structure	PRIV	NEV
Fort Shafter	650	1-Jul-64	1-Jul-64	LIBRARY MAIN	Building	FEE	NEV
Fort Shafter	230	1-Jul-65	1-Jul-65	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Fort Shafter	1650	1-Jul-66	1-Jul-66	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	321	1-Jul-66	1-Jul-66	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	421	1-Jul-66	1-Jul-66	ENGINEERING/HOUSING MAINTENANCE	Building	FEE	NEV
Fort Shafter	513	1-Jul-66	1-Jul-66	VEHICLE BRIDGE	Structure	FEE	NEV
Fort Shafter	550	1-Jul-66	1-Jul-66	EXCH MAIN STORE	Building	FEE	NEV
Fort Shafter	A1314	1-Jul-66	1-Jul-66	PEDESTRIAN BRIDGE	Structure	FEE	NEV
Fort Shafter	B0101	1-Jul-66	1-Jul-66	COOLING TOWER	Structure	FEE	NEV
Fort Shafter	1306	1-Jul-67	1-Jul-67	-	Structure	PRIV	NEV
Fort Shafter	1617	1-Jul-67	1-Jul-67	-	Structure	PRIV	NEV
Fort Shafter	231	1-Jul-67	1-Jul-67	PEDESTRIAN BRIDGES	Structure	FEE	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Fort Shafter	303	1-Jul-67	1-Jul-67	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Fort Shafter	540	1-Jul-67	1-Jul-67	PEDESTRIAN BRIDGES	Structure	FEE	NEV
Fort Shafter	A0101	1-Jul-67	1-Jul-67	POWER SUBSTATION /SWITCHING	Building	FEE	NEV
Helemano Military Reservation	1	1-Jul-44	1-Jul-44	-	Building	FEE	NEV
Helemano Military Reservation	2	1-Jul-44	1-Jul-44	-	Building	FEE	NEV
Helemano Military Reservation	7	1-Jul-44	1-Jul-44	-	Building	FEE	NEV
Helemano Military Reservation	0300B	4-Jan-52	4-Jan-52	Valve House (Pump Station Potable)	Structure	FEE	NEV
Helemano Military Reservation	302	1-Jul-52	1-Jul-52	FLAGPOLE	Structure	FEE	NEV
Helemano Military Reservation	87120	1-Jul-55	1-Jul-55	-	Structure	FEE	NEV
Helemano Military Reservation	A0300	1-Jul-57	1-Jul-57	-	Structure	FEE	NEV
Helemano Military Reservation	85221	1-Jul-61	1-Jul-61	-	Structure	FEE	NEV
Helemano Military Reservation	13290	1-Jul-64	1-Jul-64	-	Structure	FEE	NEV
Helemano Military Reservation	402	1-Jul-65	1-Jul-65	-	Building	FEE	NEV
Kahuku Tng Area	8	1-Jul-50	1-Jul-50	-	Structure	FEE	NEV
Kahuku Tng Area	87120	1-Jul-61	1-Jul-61	-	Structure	FEE	NEV
Kahuku Tng Area	89	1-Jul-61	1-Jul-61	-	Structure	FEE	NEV
Kahuku Tng Area	87150	1-Jul-63	1-Jul-63	-	Structure	FEE	NEV
Kipapa Ammo Storage Site	0028B	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NEV
Kipapa Ammo Storage Site	8	1-Jul-44	1-Jul-44	-	Building	FEE	NEV
Kipapa Ammo Storage Site	87210	1-Jul-44	1-Jul-44	-	Structure	FEE	NEV
Makua Mil Reserve	85710	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Makua Mil Reserve	100	1-Jul-66	1-Jul-66	-	Building	FEE	NEV
Mauna Kapu Comm Site	1	1-Jul-43	1-Jul-43	-	Building	FEE	NEV
Mauna Kapu Comm Site	30	1-Jul-43	1-Jul-43	-	Building	FEE	NEV
Pupukea Paalaa Uka Mil Road	8511B	1-Jul-56	1-Jul-56	KAMEHAMEHA HWY TO HELEMANO	Structure	FEE	NEV
Pupukea Paalaa Uka Mil Road	85130	1-Jul-56	1-Jul-56	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	3028	1-Jul-12	1-Jul-12	POST CEMETARY	Structure	FEE	NEV
Schofield Barracks Military Reservation	B0343	1-Jul-14	1-Jul-14	POWER SUBSTAION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	3211	1-Jul-17	1-Jul-17	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	3212	1-Jul-19	1-Jul-19	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	3214	1-Jul-19	1-Jul-19	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	360	1-Jul-19	1-Jul-19	COMPANY HEADQUARTERS BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	F0750	1-Jul-19	1-Jul-19	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	2027	1-Jul-23	1-Jul-23	TROOP DISPENSARY/HEALTH CLINIC	Building	FEE	NEV
Schofield Barracks Military Reservation	2056	1-Jul-23	1-Jul-23	RANGE SPT FACILITY	Building	FEE	NEV
Schofield Barracks Military Reservation	2061	1-Jul-23	1-Jul-23	ORG STORAGE BLDG	Building	FEE	NEV
Schofield Barracks Military Reservation	2064	1-Jul-23	1-Jul-23	GEN ITEM REPAIR INTRUCTIONAL BLDG	Building	FEE	NEV
Schofield Barracks Military Reservation	2065	1-Jul-24	1-Jul-24	PRIVATE/ORG CLUB	Building	FEE	NEV
Schofield Barracks Military Reservation	3213	1-Jul-25	1-Jul-25	KU TREE DAM	Structure	FEE	NEV
Schofield Barracks Military Reservation	A0030	1-Jul-27	1-Jul-27	WATER SUPPLY/TREATMENT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	B0030	1-Jul-27	1-Jul-27	WATER SUPPORT TREATMENT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	2131	1-Jul-30	1-Jul-30	GEN ITEM REPAIR - DOL	Building	FEE	NEV
Schofield Barracks Military Reservation	3355	1-Jul-30	1-Jul-30	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	75040	1-Jul-30	1-Jul-30	GOLF COURSE 18 HOLE	Structure	FEE	NEV
Schofield Barracks Military Reservation	482	1-Jul-32	1-Jul-32	FUNSTON GATE	Building	FEE	NEV
Schofield Barracks Military Reservation	A0061	1-Jul-32	1-Jul-32	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	A0482	1-Jul-32	29-Oct-09	FUNSTON GATE	Building	FEE	NEV
Schofield Barracks Military Reservation	B0691	1-Jul-32	1-Jul-32	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	C0481	1-Jul-32	29-Oct-09	MACOMB GATE 2	Building	FEE	NEV
Schofield Barracks Military Reservation	472	1-Jul-33	1-Jul-33	COMPANY HEADQUARTERS BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	699	1-Jul-33	1-Jul-33	INFO SYSTEM PROC	Building	FEE	NEV
Schofield Barracks Military Reservation	A0707	1-Jul-33	1-Jul-33	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	C0524	1-Jul-33	1-Jul-33	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	A0633	1-Jul-34	1-Jul-34	-	Building	MHPI	NEV
Schofield Barracks Military Reservation	I0011	1-Jul-35	1-Jul-35	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0012	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0013	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0014	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0015	1-Jul-35	1-Jul-35	STR SHED GP INS	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0016	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0017	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0018	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0019	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0020	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0021	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0022	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0023	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0024	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0025	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0026	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	I0027	1-Jul-35	1-Jul-35	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	U0001	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0002	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0003	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0004	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0005	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0006	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0007	1-Jul-35	1-Jul-35	-	Building	FEE	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Schofield Barracks Military Reservation	U0008	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0009	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0010	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	U0011	1-Jul-35	1-Jul-35	-	Building	FEE	NEV
Schofield Barracks Military Reservation	A0691	1-Jul-37	1-Jul-37	POWER PLANT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1162	1-Jul-38	1-Jul-38	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	1580	1-Jul-38	1-Jul-38	WATER SUPPLY/TREATMENT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	A0580	1-Jul-38	1-Jul-38	FLAGPOLE	Structure	FEE	NEV
Schofield Barracks Military Reservation	A1580	1-Jul-38	1-Jul-38	WATER SUPPLY/TREATMENT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1492	1-Jul-40	1-Jul-40	CO HQ	Building	FEE	NEV
Schofield Barracks Military Reservation	580	1-Jul-40	1-Jul-40	FERNANDEZ HALL	Building	FEE	NEV
Schofield Barracks Military Reservation	A0424	1-Jul-40	1-Jul-40	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	A0453	1-Jul-40	1-Jul-40	POWER SUBSTAION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	3024	1-Jul-41	1-Jul-41	CEMETARY SHED	Structure	FEE	NEV
Schofield Barracks Military Reservation	A0494	1-Jul-41	1-Jul-41	ADMIN GEN PURPOSE	Building	FEE	NEV
Schofield Barracks Military Reservation	LFILL	1-Jan-42	1-Jan-42	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	585	1-Jul-42	1-Jul-42	-	Building	FEE	NEV
Schofield Barracks Military Reservation	3267	1-Jul-43	1-Jul-43	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	6350	1-Jul-43	1-Jul-43	WATER SUPPLY/TREATMENT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	A2271	1-Jul-43	1-Jul-43	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	M3010	1-Jul-43	1-Jul-43	POWER PLANT BLDG	Building	FEE	NEV
Schofield Barracks Military Reservation	480	1-Jul-44	1-Jul-44	CASTNER SUBSTATION	Building	FEE	NEV
Schofield Barracks Military Reservation	636	1-Jul-45	1-Jul-45	MCNAIR GATE	Building	FEE	NEV
Schofield Barracks Military Reservation	1180	1-Jul-46	1-Jul-46	MAINTENANCE SHOP, GP	Building	FEE	NEV
Schofield Barracks Military Reservation	645	1-Jul-48	1-Jul-48	-	Building	FEE	NEV
Schofield Barracks Military Reservation	78	1-Jul-48	1-Jul-48	LYMAN GATE	Building	FEE	NEV
Schofield Barracks Military Reservation	B1087	1-Jul-50	1-Jul-50	RECYCLING CENTER FACILITY	Structure	FEE	NEV
Schofield Barracks Military Reservation	3377Z	21-May-51	30-Nov-11	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	D1180	1-Jul-51	1-Jul-51	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	ERBR1	1-Jul-51	1-Jul-51	TRAINING AREA BRIDGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	SR001	1-Jul-51	1-Jul-51	MANEUVER/TRAINING AREA, LIGHT	Structure	FEE	NEV
Schofield Barracks Military Reservation	SR005	1-Jul-51	1-Jul-51	MANEUVER/TRAINING AREA LIGHT	Structure	FEE	NEV
Schofield Barracks Military Reservation	SR05A	1-Jul-51	1-Jul-51	LIGHT DEMOLITION RANGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	A0076	16-Jul-51	5-Nov-09	RALSTON FIELD - DUG OUT 1	Structure	FEE	NEV
Schofield Barracks Military Reservation	B0076	22-Jul-51	5-Nov-09	RALSTON FIELD - DUG OUT	Structure	FEE	NEV
Schofield Barracks Military Reservation	1144	1-Jul-52	1-Jul-52	RANGE SUPPORT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	4	1-Jul-52	1-Jul-52	PUMP HOUSE 4, WATER SPT BLDG	Building	FEE	NEV
Schofield Barracks Military Reservation	ERBR2	1-Jul-52	1-Jul-52	TRAINING AREA BRIDGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	MK004	1-Jul-52	1-Jul-52	STANDBY GENERATOR	Structure	FEE	NEV
Schofield Barracks Military Reservation	6508	1-Jul-53	1-Jul-53	ADMIN GENERAL PURPOSE	Building	FEE	NEV
Schofield Barracks Military Reservation	C0004	1-Jul-54	1-Jul-54	CHLORINATOR FACILITY	Structure	FEE	NEV
Schofield Barracks Military Reservation	ERBR5	1-Jul-54	1-Jul-54	TRAINING AREA BRIDGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	2407	1-Jul-55	1-Jul-55	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	2447	1-Jul-55	1-Jul-55	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	72591	1-Jul-55	1-Jul-55	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	930	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Schofield Barracks Military Reservation	D1580	1-Jul-55	1-Jul-55	CHLORINATOR FACILITY	Structure	FEE	NEV
Schofield Barracks Military Reservation	3011	1-Jul-56	1-Jul-56	POWER PLANT BLDG	Building	FEE	NEV
Schofield Barracks Military Reservation	638	1-Jul-56	1-Jul-56	REC SUPPORT FAC	Building	FEE	NEV
Schofield Barracks Military Reservation	1145	1-Jul-57	1-Jul-57	COVERED TRAINING AREA	Structure	FEE	NEV
Schofield Barracks Military Reservation	556	1-Jul-57	1-Jul-57	DRUG/ALCOHOL ABUSE CENTER	Building	FEE	NEV
Schofield Barracks Military Reservation	A0604	1-Jul-57	1-Jul-57	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	A0622	1-Jul-57	1-Jul-57	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	A0653	1-Jul-57	1-Jul-57	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	B0450	1-Jul-57	1-Jul-57	REFUSE COLL FAC	Structure	FEE	NEV
Schofield Barracks Military Reservation	C0158	1-Jul-57	1-Jul-57	COURT AREA	Structure	FEE	NEV
Schofield Barracks Military Reservation	3320	1-Jul-58	1-Jul-58	EXCHANGE SERVICE OUTLET	Building	FEE	NEV
Schofield Barracks Military Reservation	3321	1-Jul-58	1-Jul-58	-	Building	PRIV	NEV
Schofield Barracks Military Reservation	3449	1-Jul-58	1-Jul-58	COMMUNICATIONS CENTER	Building	FEE	NEV
Schofield Barracks Military Reservation	75090	1-Jul-58	1-Jul-58	-	Structure	PRIV	NEV
Schofield Barracks Military Reservation	ERBR8	1-Jul-59	1-Jul-59	TRAINING AREA BRIDGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	1134	1-Jul-60	1-Jul-60	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1184	1-Jul-60	1-Jul-60	OBSERVATION TOWER	Structure	FEE	NEV
Schofield Barracks Military Reservation	1185	1-Jul-60	1-Jul-60	RANGE SUPPORT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1494	1-Jul-60	1-Jul-60	COMPANY HEADQUARTERS BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	2292	1-Jul-60	1-Jul-60	OBSERVATION TOWER	Structure	FEE	NEV
Schofield Barracks Military Reservation	2293	1-Jul-60	1-Jul-60	RANGE SPT BLDG	Building	FEE	NEV
Schofield Barracks Military Reservation	2294	1-Jul-60	1-Jul-60	FLAGPOLE	Structure	FEE	NEV
Schofield Barracks Military Reservation	2295	1-Jul-60	1-Jul-60	FLAGPOLE	Structure	FEE	NEV
Schofield Barracks Military Reservation	2382	1-Jul-60	1-Jul-60	FLAGPOLE	Structure	FEE	NEV
Schofield Barracks Military Reservation	8000	1-Jul-60	1-Jul-60	ORGANIZATIONAL CLASSROOM	Building	FEE	NEV
Schofield Barracks Military Reservation	8001	1-Jul-60	1-Jul-60	ORGANIZATIONAL CLASSROOM	Building	FEE	NEV
Schofield Barracks Military Reservation	8002	1-Jul-60	1-Jul-60	ORGANIZATIONAL CLASSROOM	Building	FEE	NEV
Schofield Barracks Military Reservation	8003	1-Jul-60	1-Jul-60	ORGANIZATIONAL CLASSROOM	Building	FEE	NEV
Schofield Barracks Military Reservation	8004	1-Jul-60	1-Jul-60	ORGANIZATIONAL CLASSROOM	Building	FEE	NEV
Schofield Barracks Military Reservation	8005	1-Jul-60	1-Jul-60	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	785	16-Jul-60	15-Oct-09	CARPORT	Structure	FEE	NEV
Schofield Barracks Military Reservation	787	17-Jul-60	15-Oct-09	CARPORT	Structure	FEE	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Schofield Barracks Military Reservation	790	1-Jul-61	1-Jul-61	CHAPEL	Building	FEE	NEV
Schofield Barracks Military Reservation	1135	1-Jul-62	1-Jul-62	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1136	1-Jul-62	1-Jul-62	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1137	1-Jul-62	1-Jul-62	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1200	1-Jul-62	1-Jul-62	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1621	1-Jul-62	1-Jul-62	VEHICLE MAINTENANCE SHOP	Building	FEE	NEV
Schofield Barracks Military Reservation	B0255	1-Jul-62	1-Jul-62	POWER PLANT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	1215	1-Jul-63	1-Jul-63	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	A0539	1-Jul-63	1-Jul-63	POWER SUBSTATION/SWITCHING STATION	Building	FEE	NEV
Schofield Barracks Military Reservation	C1133	1-Jul-63	1-Jul-63	FLAGPOLE	Structure	FEE	NEV
Schofield Barracks Military Reservation	1225	1-Jul-64	1-Jul-64	SEPARATE TOILET/SHOWER BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	2093	1-Jul-64	1-Jul-64	SUB/SWIT STA BD	Building	FEE	NEV
Schofield Barracks Military Reservation	2360	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Schofield Barracks Military Reservation	C0699	1-Jul-64	1-Jul-64	INCINERATOR FACILITY	Structure	FEE	NEV
Schofield Barracks Military Reservation	579	1-Jul-65	1-Jul-65	POWER PLANT BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	8500	1-Jul-65	1-Jul-65	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	MK001	1-Jul-65	1-Jul-65	AIRCRAFT CONTROL AND WARNING	Building	FEE	NEV
Schofield Barracks Military Reservation	MK003	1-Jul-65	1-Jul-65	PUMP STATION POTABLE	Structure	FEE	NEV
Schofield Barracks Military Reservation	MK812	1-Jul-65	1-Jul-65	SUBSTATION	Structure	FEE	NEV
Schofield Barracks Military Reservation	2400	1-Jul-66	1-Jul-66	VEHICLE MAINTENANCE SHOP	Building	FEE	NEV
Schofield Barracks Military Reservation	2401	1-Jul-66	1-Jul-66	GREASE RACK	Structure	FEE	NEV
Schofield Barracks Military Reservation	2402	1-Jul-66	1-Jul-66	OIL STORAGE BUILDING NON-DOL/DPW	Building	FEE	NEV
Schofield Barracks Military Reservation	2403	1-Jul-66	1-Jul-66	GREASE RACK	Structure	FEE	NEV
Schofield Barracks Military Reservation	2404	1-Jul-66	1-Jul-66	WASH PLATFORM ORGANIZATIONAL	Structure	FEE	NEV
Schofield Barracks Military Reservation	2406	1-Jul-66	1-Jul-66	ORGANIZATIONAL STORAGE BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	2420	1-Jul-66	1-Jul-66	3rd Bde Motorpool	Building	FEE	NEV
Schofield Barracks Military Reservation	2421	1-Jul-66	1-Jul-66	GREASE RACK	Structure	FEE	NEV
Schofield Barracks Military Reservation	2422	1-Jul-66	1-Jul-66	-	Building	FEE	NEV
Schofield Barracks Military Reservation	2423	1-Jul-66	1-Jul-66	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	2424	1-Jul-66	1-Jul-66	WASH PLATFORM ORGANIZATIONAL	Structure	FEE	NEV
Schofield Barracks Military Reservation	2426	1-Jul-66	1-Jul-66	ADMIN AND SHOP CONTROL NON-	Building	FEE	NEV
Schofield Barracks Military Reservation	2440	1-Jul-66	1-Jul-66	VEHICLE MAINTENANCE SHOP	Building	FEE	NEV
Schofield Barracks Military Reservation	2441	1-Jul-66	1-Jul-66	GREASE RACK	Structure	FEE	NEV
Schofield Barracks Military Reservation	2442	1-Jul-66	1-Jul-66	OIL STORAGE BUILDING NON DOL/DPW	Building	FEE	NEV
Schofield Barracks Military Reservation	2443	1-Jul-66	1-Jul-66	GREASE RACK	Structure	FEE	NEV
Schofield Barracks Military Reservation	2444	1-Jul-66	1-Jul-66	WASH PLATFORM ORGANIZATIONAL	Structure	FEE	NEV
Schofield Barracks Military Reservation	2446	1-Jul-66	1-Jul-66	DISPATCH BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	3022	1-Jul-66	1-Jul-66	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	3023	1-Jul-66	1-Jul-66	STORAGE SHED GENERAL PURPOSE	Structure	FEE	NEV
Schofield Barracks Military Reservation	87150	1-Jul-66	1-Jul-66	RETAINING STRUCTURE	Structure	FEE	NEV
Schofield Barracks Military Reservation	940	1-Jul-66	1-Jul-66	-	Building	FEE	NEV
Schofield Barracks Military Reservation	942	1-Jul-66	1-Jul-66	-	Building	FEE	NEV
Schofield Barracks Military Reservation	949	1-Jul-66	1-Jul-66	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	CR001	1-Jul-66	1-Jul-66	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	CR002	1-Jul-66	1-Jul-66	BASIC 10M-25M FIRING RANGE (ZERO)	Structure	FEE	NEV
Schofield Barracks Military Reservation	CR003	1-Jul-66	1-Jul-66	-	Structure	FEE	NEV
Schofield Barracks Military Reservation	CRO2A	1-Jul-66	1-Jul-66	NON STANDARD SMALL ARMS RANGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	KR005	1-Jul-66	1-Jul-66	MANEUVER TRAINING AREA HEAVY	Structure	FEE	NEV
Schofield Barracks Military Reservation	KR006	1-Jul-66	1-Jul-66	SQUAD DEFENSE RANGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	KR008	1-Jul-66	1-Jul-66	LIGHT ANTIARMOR WEAPONS (LAW/AT-4)	Structure	FEE	NEV
Schofield Barracks Military Reservation	KR009	1-Jul-66	1-Jul-66	GRENADE LAUNCHER RANGE	Structure	FEE	NEV
Schofield Barracks Military Reservation	500	1-Jul-67	1-Jul-67	BRIGADE HEADQUARTERS BUILDING	Building	FEE	NEV
Schofield Barracks Military Reservation	A0750	1-Jul-67	1-Jul-67	-	Building	FEE	NEV
Schofield Barracks Military Reservation	09027	-	1-Jul-76	-	Structure	OPRI	-
Schofield Barracks Military Reservation	09051	-	1-Jul-77	-	Structure	OPRI	-
Schofield Barracks Military Reservation	72092	-	31-Oct-04	GARAGE FAM HOUSING	Building	MHPI	-
Schofield Barracks Military Reservation	72001	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72002	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72003	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72004	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72005	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72006	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72007	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72008	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72010	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72011	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72012	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72013	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72014	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72015	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72016	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72017	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72018	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72019	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72020	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72021	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72022	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV
Schofield Barracks Military Reservation	72023	-	31-Oct-14	GARAGE FAM HOUSING	Building	MHPI	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Signal Cable Trunking System	57	1-Jul-36	1-Jul-36	-	Building	FEE	NEV
Signal Cable Trunking System	804	1-Jul-36	1-Jul-36	-	Building	FEE	NEV
Signal Cable Trunking System	91	1-Jul-36	1-Jul-36	-	Building	FEE	NEV
Signal Cable Trunking System	C0008	1-Jul-36	1-Jul-36	-	Building	FEE	NEV
Signal Cable Trunking System	C0082	1-Jul-36	1-Jul-36	-	Building	FEE	NEV
Signal Cable Trunking System	230	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	40	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	41	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	425	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	534	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	539	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	635	1-Jul-41	1-Jul-41	CABLE TRUNK	Structure	FEE	NEV
Signal Cable Trunking System	642	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	644	1-Jul-41	1-Jul-41	CABLE TRUNK	Structure	FEE	NEV
Signal Cable Trunking System	803	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	836	1-Jul-41	1-Jul-41	CABLE TRUNK	Structure	FEE	NEV
Signal Cable Trunking System	924	1-Jul-41	1-Jul-41	CABLE TRUNK	Structure	FEE	NEV
Signal Cable Trunking System	943	1-Jul-41	1-Jul-41	CABLE TRUNK	Structure	FEE	NEV
Signal Cable Trunking System	B0029	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	B0031	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	B0040	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	B0052	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	C0065	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	C0084	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	C0085	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	C0089	1-Jul-41	1-Jul-41	-	Structure	FEE	NEV
Signal Cable Trunking System	C0611	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	D0008	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	H0009	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	H0091	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	H0093	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	J0009	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	J0091	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	J0092	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	K0004	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	L0007	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	L0073	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	N0069	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	N0080	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	N0081	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	N0813	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	R0005	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	S0021	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	S0022	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	S0023	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	W0003	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	W0031	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	W0032	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	W0034	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	Y0031	1-Jul-41	1-Jul-41	-	Building	FEE	NEV
Signal Cable Trunking System	N0088	1-Jul-56	1-Jul-56	-	Building	FEE	NEV
Signal Cable Trunking System	B0053	1-Jul-58	1-Jul-58	-	Building	FEE	NEV
Signal Cable Trunking System	C0081	1-Jul-58	1-Jul-58	-	Building	FEE	NEV
Signal Cable Trunking System	C0314	1-Jul-59	1-Jul-59	-	Building	FEE	NEV
Tripler Army Medical Center	LFILL	1-Jan-47	1-Jan-47	-	Structure	FEE	NEV
Tripler Army Medical Center	130	1-Jul-48	1-Jul-48	BASEBALL BLEACHERS	Structure	FEE	NEV
Tripler Army Medical Center	145	1-Jul-48	1-Jul-48	-	Building	FEE	NEV
Tripler Army Medical Center	238	1-Jul-48	1-Jul-48	-	Building	MHPI	NEV
Tripler Army Medical Center	239	1-Jul-48	1-Jul-48	-	Building	MHPI	NEV
Tripler Army Medical Center	600	1-Jul-48	1-Jul-48	-	Structure	FEE	NEV
Tripler Army Medical Center	7	1-Jul-48	1-Jul-48	FLAGPOLE	Structure	FEE	NEV
Tripler Army Medical Center	8511B	1-Jul-48	1-Jul-48	-	Structure	FEE	NEV
Tripler Army Medical Center	94	1-Jul-48	1-Jul-48	-	Building	FEE	NEV
Tripler Army Medical Center	96	1-Jul-48	1-Jul-48	-	Structure	FEE	NEV
Tripler Army Medical Center	98	1-Jul-48	1-Jul-48	-	Structure	FEE	NEV
Tripler Army Medical Center	397	1-Jul-60	1-Jul-60	-	Structure	PRIV	NEV
Tripler Army Medical Center	134	1-Jul-63	1-Jul-63	-	Structure	FEE	NEV
Tripler Army Medical Center	10	1-Jul-65	1-Jul-65	OXYGEN STORAGE INSTALLATION	Structure	FEE	NEV
Tripler Army Medical Center	87150	1-Jul-65	1-Jul-65	RETAIN STRUCTURE	Structure	FEE	NEV
Tripler Army Medical Center	129	1-Jul-67	1-Jul-67	BASEBALL DUGOUT	Structure	FEE	NEV
Tripler Army Medical Center	87290	1-Jul-67	1-Jul-67	-	Structure	FEE	NEV
Tripler Army Medical Center	88010	1-Jul-67	1-Jul-67	-	Structure	FEE	NEV
Waianae-Kai Military Reservation	4006	1-Jul-37	1-Jul-37	WAIANAEO HOUSE	Building	FEE	NEV
Waianae-Kai Military Reservation	4019	1-Jul-37	1-Jul-37	HARVEY HOUSE	Building	LEAS	NEV
Waianae-Kai Military Reservation	4007	1-Jul-38	1-Jul-38	MAINTENANCE SHOP GENERAL PURPOSE	Building	FEE	NEV
Waianae-Kai Military Reservation	15430	1-Jul-45	1-Jul-45	SEA WALLS	Structure	FEE	NEV
Waianae-Kai Military Reservation	110	1-Jul-60	1-Jul-60	CONCRETE LODGING UNIT	Building	FEE	NEV
Waikakalaua Ammo Stor Tunnels	0004A	1-Jul-44	1-Jul-44	AIR/FALLOUT SHELTER	Building	FEE	NEV

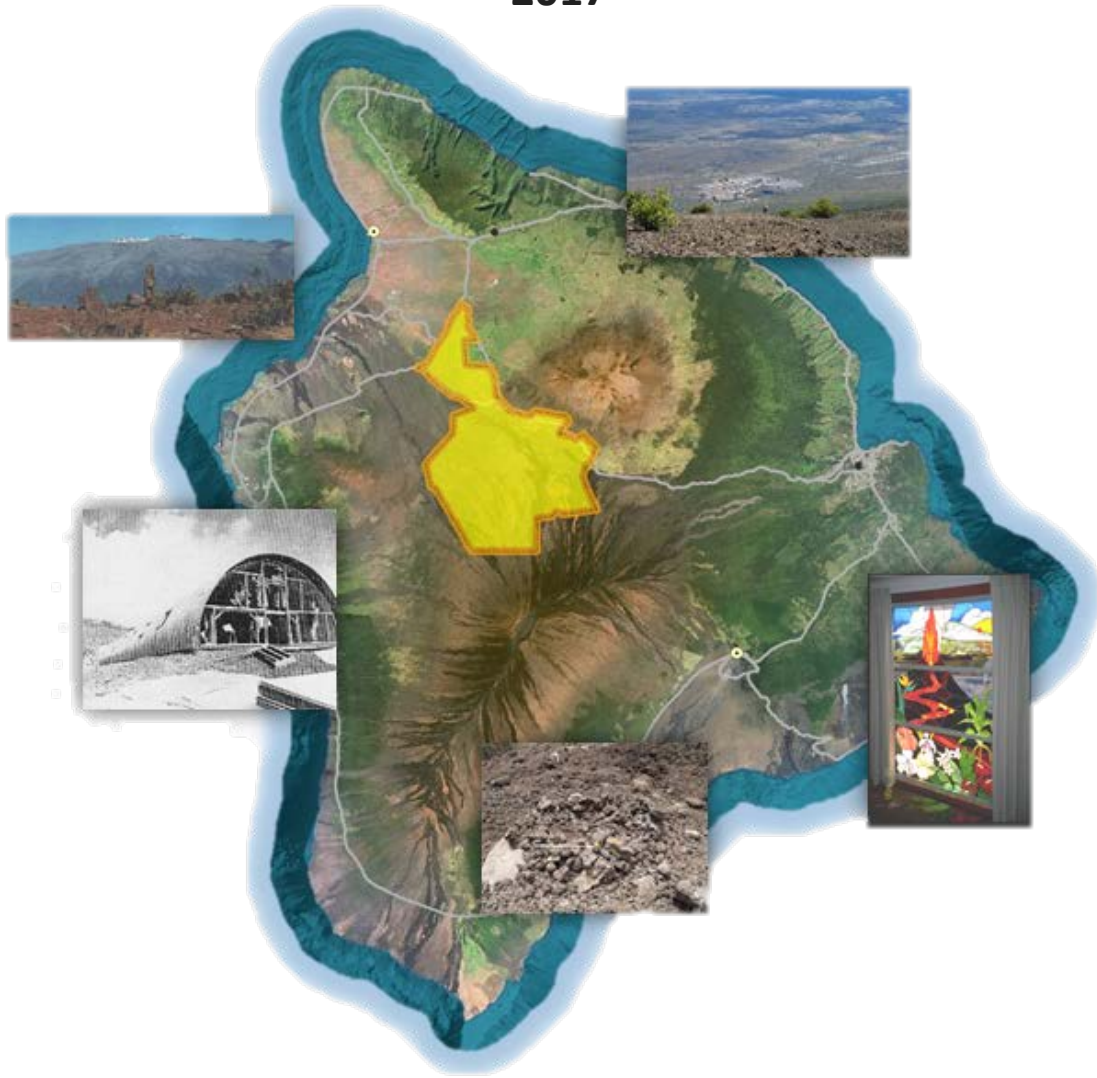
SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Waikakalaua Ammo Stor Tunnels	87210	1-Jul-44	1-Jul-44	-	Structure	FEE	NEV
Wheeler Army Airfield	1001	1-Jul-32	1-Jul-32	-	Structure	FEE	NEV
Wheeler Army Airfield	81102	1-Jul-32	1-Jul-32	SUBSTATION	Structure	FEE	NEV
Wheeler Army Airfield	81203	1-Jul-32	1-Jul-32	-	Structure	FEE	NEV
Wheeler Army Airfield	81204	1-Jul-32	1-Jul-32	-	Structure	FEE	NEV
Wheeler Army Airfield	21900	1-Jul-37	1-Jul-37	-	Structure	FEE	NEV
Wheeler Army Airfield	85203	1-Jul-37	1-Jul-37	-	Structure	FEE	NEV
Wheeler Army Airfield	1	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	10	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	1070	1-Jul-43	1-Jul-43	-	Building	FEE	NEV
Wheeler Army Airfield	11	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	13	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	14	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	15	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	1500	1-Jul-43	1-Jul-43	AIR RAID/FALLOUT SHELTER	Building	FEE	NEV
Wheeler Army Airfield	1501	1-Jul-43	1-Jul-43	AIR RAID/FALLOUT SHELTER	Building	FEE	NEV
Wheeler Army Airfield	1502	1-Jul-43	1-Jul-43	AIR RAID/ FALLOUT SHELTER	Building	FEE	NEV
Wheeler Army Airfield	1503	1-Jul-43	1-Jul-43	-	Building	FEE	NEV
Wheeler Army Airfield	18	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	19	1-Jul-43	1-Jul-43	PLANT/UTILITIES BLDG	Building	FEE	NEV
Wheeler Army Airfield	2	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	20	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	21	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	22	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	23	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	24	1-Jul-43	1-Jul-43	PLT/UTIL BLDG	Building	FEE	NEV
Wheeler Army Airfield	3	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	31	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	32	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	4	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	5	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	6	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	637	1-Jul-43	1-Jul-43	WATER SPT / TREATMENT BLDG	Building	FEE	NEV
Wheeler Army Airfield	659	1-Jul-43	1-Jul-43	SAFETY BLDG	Building	FEE	NEV
Wheeler Army Airfield	7	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	75004	1-Jul-43	1-Jul-43	-	Structure	PRIV	NEV
Wheeler Army Airfield	8	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	802	1-Jul-43	1-Jul-43	-	Building	FEE	NEV
Wheeler Army Airfield	87201	1-Jul-43	1-Jul-43	-	Structure	FEE	NEV
Wheeler Army Airfield	9	1-Jul-43	1-Jul-43	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	98	1-Jul-43	1-Jul-43	FLAGPOLE	Structure	OTHR	NEV
Wheeler Army Airfield	73000	1-Jul-48	1-Jul-48	-	Structure	FEE	NEV
Wheeler Army Airfield	87202	1-Jul-55	1-Jul-55	-	Structure	FEE	NEV
Wheeler Army Airfield	87203	1-Jul-56	1-Jul-56	-	Structure	FEE	NEV
Wheeler Army Airfield	1004	1-Jul-57	1-Jul-57	AIRFIELD OPERATIONS BUILDING	Building	FEE	NEV
Wheeler Army Airfield	27	1-Jul-57	1-Jul-57	PLANT/UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	75030	1-Jul-57	1-Jul-57	-	Structure	PRIV	NEV
Wheeler Army Airfield	75070	1-Jul-57	1-Jul-57	-	Structure	PRIV	NEV
Wheeler Army Airfield	101	1-Jul-61	1-Jul-61	PLANT UTILITIES BUILDING	Building	FEE	NEV
Wheeler Army Airfield	130	1-Jul-65	1-Jul-65	SUBSTATION	Structure	FEE	NEV
Wheeler Army Airfield	131	1-Jul-65	1-Jul-65	POWER PLANT BLDG	Building	FEE	NEV
Wheeler Army Airfield	13612	1-Jul-65	1-Jul-65	APPROACH LIGHTING SYSTEM	Structure	FEE	NEV
Wheeler Army Airfield	71415	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71440	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71502	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71512	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71540	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71542	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71543	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71544	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71546	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71548	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71549	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71550	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71551	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71552	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71554	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71556	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71558	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71560	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71623	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71626	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71627	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71628	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71629	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71630	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71631	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71632	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Wheeler Army Airfield	71634	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71636	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71638	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71658	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	71660	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Wheeler Army Airfield	1322	1-Jul-67	1-Jul-67	COMMUNICATIONS CENTER	Building	FEE	NEV
Wheeler Army Airfield	1324	1-Jul-67	1-Jul-67	POWER PLANT BUILDING	Building	FEE	NEV
Wheeler Army Airfield	21110	-	16-Jan-01	C-26 HANGAR 945	Building	FEE	-
Wheeler Army Airfield	61050	-	16-Jan-01	Bldg 825 C-26 Ops	Building	FEE	-
Wheeler Army Airfield	82610	-	16-Jan-01	C-26 AIR CONDITIONING SYSTEM	Structure	FEE	-
Wheeler Army Airfield	930	-	-	PLT/UTIL BLDG (Pump Shelter Building)	Building	FEE	NEV
Wheeler Army Airfield	A0850	-	6-Nov-12	MISCELLANEOUS SHED	Structure	FEE	NEV

Integrated Cultural Resources Management Plan U.S. Army Garrison, Pōhakuloa HAWAI'I ISLAND

Draft

2017



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**U.S. Army Garrison, Pōhakuloa
Hawai‘i Island
Integrated Cultural Resources Management Plan
2017**

Table of Contents

EXECUTIVE SUMMARY	VII
1. INTRODUCTION	1
1.1. ICRMP PURPOSE	1
<i>Updating the ICRMP</i>	<i>1</i>
1.2. MISSION	2
<i>US Army Pacific (USARPAC)</i>	<i>2</i>
<i>Installation Management Command–Pacific (IMCOM-PAC)</i>	<i>2</i>
<i>U.S. Army Garrison, Hawai‘i (USAG-HI)</i>	<i>2</i>
<i>U.S. Army Garrison, Pōhakuloa (USAG-Pōhakuloa)</i>	<i>3</i>
<i>25th Infantry Division (25th ID).....</i>	<i>3</i>
<i>U.S. Army, Hawaii (USARHAW).....</i>	<i>4</i>
<i>Other USAG-HI Tenant Commands and Units.....</i>	<i>4</i>
1.3. MISSION ACTIVITIES OF USAG-PŌHAKULOA SUB-INSTALLATIONS	5
1.4. MANAGEMENT AND RESPONSIBILITIES	6
<i>USAG-HI Garrison Commander.....</i>	<i>7</i>
<i>USAG-Pōhakuloa Garrison Commander</i>	<i>7</i>
<i>Proponent for a Project, Action, or Undertaking</i>	<i>9</i>
1.5. PARTNERSHIPS	11
<i>Advisory Council on Historic Preservation.....</i>	<i>11</i>
<i>National Park Service.....</i>	<i>11</i>
<i>Hawai‘i State Historic Preservation Division (SHPD).....</i>	<i>11</i>
<i>Historic Hawai‘i Foundation.....</i>	<i>12</i>
<i>Hawai‘i State Office of Hawaiian Affairs (OHA).....</i>	<i>12</i>
<i>Native Hawaiian Organizations</i>	<i>12</i>
1.6. STATUTES, REGULATIONS, AND GUIDELINES	13
<i>Federal Statutes.....</i>	<i>13</i>
<i>Executive Orders</i>	<i>16</i>
<i>Presidential Memoranda</i>	<i>17</i>
<i>Federal Regulations</i>	<i>17</i>
<i>Department of Defense Instructions and Guidance.....</i>	<i>21</i>
<i>U.S. Army Regulations and Guidance</i>	<i>21</i>
<i>USAG-HI Regulations and Guidance</i>	<i>23</i>
<i>Secretary of the Interior’s Standards and Guidelines.....</i>	<i>24</i>
<i>Advisory Council on Historic Preservation.....</i>	<i>25</i>
<i>State of Hawai‘i Statutes and Rules.....</i>	<i>26</i>
2. GEOGRAPHIC AND CULTURAL CONTEXTS	27
2.1. GEOGRAPHIC CONTEXT	27
<i>Hawaiian Islands.....</i>	<i>27</i>
<i>Geographic Context of Hawai‘i.....</i>	<i>27</i>
2.2. CULTURAL CONTEXT	29
<i>Traditional Hawaiian Context.....</i>	<i>31</i>
<i>Western Contact Context.....</i>	<i>32</i>

<i>Nineteenth Century Context</i>	33
<i>Twentieth Century Context</i>	36
<i>Military Context</i>	36
3. CULTURAL RESOURCES OVERVIEW	41
3.1. CATEGORIES OF CULTURAL RESOURCES AT USAG-PŌHAKULOA.....	41
<i>Historic Status Codes</i>	42
3.2. GENERAL OVERVIEW OF CULTURAL RESOURCES INVENTORY AT USAG-PŌHAKULOA.....	44
<i>Archaeological Sites</i>	44
<i>Sacred Sites</i>	44
<i>Historic Buildings, Structures, and Objects</i>	45
<i>Historic Districts</i>	45
<i>Curation Facility</i>	45
<i>Cultural Items</i>	45
<i>Informational challenges</i>	46
3.3. CULTURAL RESOURCES INVENTORY	47
<i>Archaeological Resources</i>	47
<i>Historic Buildings, Sites, Structures, and Districts</i>	48
<i>Cultural Items</i>	49
3.4. MISSION ACTIVITIES AND MILITARY IMPACTS TO CULTURAL RESOURCES	50
<i>Impacts to Historic Buildings, Structures, and Districts</i>	50
<i>Impacts to Archaeological Resources</i>	50
<i>Impacts to Sacred Sites</i>	51
<i>Impacts to Curated Archaeological Collections and associated records</i>	51
<i>Impacts to Cultural Items</i>	51
4. GOALS AND OBJECTIVES	52
4.1. GOALS	52
4.2. PLANNING OBJECTIVES	52
4.3. 5-YEAR PROJECT PLANNING	55
5. STANDARD OPERATING PROCEDURES	56
5.1. SOP 1: COMPLIANCE PROCEDURES FOR NHPA SECTION 106.....	56
<i>Introduction</i>	56
<i>Implementing Authorities</i>	56
<i>Important Concepts</i>	56
<i>Standard Section 106 4-Step Process</i>	57
<i>Program Alternatives and Options</i>	57
<i>Participants in NHPA Section 106 Process</i>	57
<i>Section 106 Procedure</i>	59
<i>Coordinating the NEPA Process with NHPA Section 106 Regulations</i>	64
<i>Guidance for National Historic Landmarks</i>	64
<i>Guidance for consideration of places with religious and cultural significance for Native Hawaiian Organizations</i>	64
5.2. SOP 2: IDENTIFY AND EVALUATE HISTORIC PROPERTIES	65
<i>Introduction</i>	65

<i>Implementing Regulations</i>	65
<i>Important Concepts</i>	65
<i>NRHP Criteria</i>	65
<i>Procedures</i>	66
5.3. SOP 3: UNANTICIPATED DISCOVERY OF HISTORIC PROPERTIES AND INADVERTENT DISCOVERY OF HUMAN REMAINS AND/OR CULTURAL ITEMS	67
<i>Introduction</i>	67
<i>Laws, Implementing Regulations, and Guidance</i>	67
<i>Important Concepts</i>	68
<i>ARPA and NAGPRA Statements for inclusion with Permits, Leases, and Contracts</i>	68
<i>Procedures</i>	69
5.4. SOP 4: EMERGENCY SITUATIONS	72
<i>Introduction</i>	72
<i>Laws and Implementing Regulations</i>	72
<i>Important Concepts</i>	72
<i>Emergencies</i>	72
5.5. SOP 5: NAGPRA: PLANNED ACTIVITIES AND COMPREHENSIVE AGREEMENTS.....	74
<i>Introduction</i>	74
<i>Implementing Regulations</i>	74
<i>Important Concepts</i>	74
<i>Intentional Excavation</i>	74
<i>Treatment and Disposition: Native Hawaiian Human Remains</i>	75
<i>NAGPRA Plan of Action (POA) or Comprehensive Agreement (CA)</i>	75
<i>Dispute Resolution</i>	76
5.6. SOP 6: ARCHAEOLOGICAL RESOURCES PROTECTION ACT OF 1979 COMPLIANCE PROCESS.....	77
<i>Introduction</i>	77
<i>Laws and Implementing Regulations</i>	77
<i>Important Concepts</i>	77
<i>ARPA Permit Procedures</i>	78
<i>Procedures for ARPA Violation (unpermitted excavations)</i>	78
5.7. SOP 7: NATIVE HAWAIIAN CONSULTATION.....	79
<i>Introduction</i>	79
<i>Laws, Implementing Regulations, and other guidance</i>	79
<i>Important Concepts</i>	79
<i>Confidentiality</i>	79
<i>Timing and Process</i>	79
5.8. SOP 8: ARCHAEOLOGICAL COLLECTIONS CURATION AND MANAGEMENT.....	81
<i>Introduction</i>	81
<i>Laws, Implementing Regulations, Guidance, and policy</i>	81
<i>Important Concepts</i>	81
<i>Collections Curation and Management Procedures</i>	81
5.9. SOP 9: MAINTENANCE PROCEDURES FOR HISTORIC BUILDINGS AND STRUCTURES	82
<i>Introduction</i>	82
<i>Laws, Implementing Regulations, and guidance</i>	82
<i>Important concepts</i>	82
<i>General Guidelines</i>	82

6. IMPLEMENTING THE ICRMP	84
6.1. CULTURAL RESOURCES IMPLEMENTATION OBJECTIVES	84
6.2. REPORTING	86
6.3. COOPERATIVE AGREEMENTS	86
6.4. NHPA SECTION 106 AGREEMENTS	87
6.5. ORGANIZATIONAL ENHANCEMENT, ROLES AND RESPONSIBILITIES	89
<i>Installation Integration</i>	89
<i>Command Support</i>	89
<i>Cultural Resource Organization</i>	89
<i>Public Involvement, Outreach, and Educational Materials</i>	91
6.6. FINANCIAL MANAGEMENT AND FUNDING	93
7. REFERENCES	94
8. APPENDICES	103
8.1. APPENDIX A: LIST OF ACRONYMS	103
8.2. APPENDIX B: USAG-HI DPW ENV CULTURAL RESOURCES MATERIAL REMAINS AND ASSOCIATED RECORDS CURATION STANDARDS, IMPLEMENTED BY USAG-PŌHAKULOA	107
8.3. APPENDIX C: ENVIRONMENTAL ASSESSMENT AND DRAFT FONSI	110
8.4. APPENDIX D: USAG-PŌHAKULOA CULTURAL RESOURCES INVENTORY	174

Table of Figures:

TABLE 1: USAG-PŌHAKULOA SUB-INSTALLATIONS	5
TABLE 2: FINDINGS OF EFFECT, SUPPORTING INFORMATION, COMPLETION OF PROCESS	62
 FIGURE 1: NATIONAL NAGPRA GUIDANCE FOR INADVERTENT DISCOVERIES ON FEDERAL LANDS (HTTPS://WWW.NPS.GOV/NAGPRA/TRAINING/INTENTIONAL_EXCAVATIONS.PDF)	71

EXECUTIVE SUMMARY

This Integrated Cultural Resources Management Plan (ICRMP) for United States Army Garrison, Pōhakuloa (USAG-Pōhakuloa) is a management plan to integrate the cultural resources management program with ongoing mission activities. The mission of USAG-Pōhakuloa is to provide military training opportunities for military and civilian personnel in preparation for deployment anywhere in the world, providing live fire and maneuver capability for the Army, law enforcement at all levels from county to federal agencies, and for other American and allied foreign military services.

The primary purpose of this ICRMP is to provide USAG-Pōhakuloa managers with a guide to ensure compliance with applicable cultural resources management laws and regulations. The ICRMP describes the fundamental requirements of cultural resources management, including identification and evaluation of cultural resources, consultation with concerned parties, consideration of impacts, and decisions about how to treat resources.

ICRMPs are established by Department of Defense Instruction (DoDI) 4715.16 as a Department of Defense (DoD) management plan. Army Regulation (AR) 200-1 *Environmental Protection and Enhancement*, is the implementing regulation for Army Cultural Resources programs. ICRMPs integrate the entirety of the installation's Cultural Resources Management program with ongoing mission activities, and identify compliance actions necessary to maintain the availability of mission essential properties and acreage.

AR 200-1 specifies Army policy for cultural resources management including the development of integrated cultural resources management plans for planning purposes. The Installation Management Command (IMCOM) directs and assists its installations with Cultural Resources Programs consistent with AR 200-1. The Garrison Commander has direct responsibility for establishing an installation's Cultural Resources Program and implementing a plan that successfully integrates cultural resources management within the process of achieving mission objectives.

The Cultural Resources Manager (CRM) plays a primary role in implementing the ICRMP. The CRM coordinates compliance with historic preservation laws and Army regulations on behalf of the Garrison Commander. The CRM coordinates with appropriate parties to ensure compliance with federal historic preservation laws, regulations and executive orders, with particular attention to the National Historic Preservation Act (NHPA), the Native American Grave Protection and Repatriation Act (NAGPRA), and the Archeological Resources Protection Act (ARPA), among others. The ICRMP integrates the management of cultural resources with other plans and processes and adopts goals to improve the program during the effective period of the plan.

The ICRMP contains a set of policies and procedures that enable USAG-Pōhakuloa to achieve and maintain compliance with various historic preservation management laws and regulations. The legal foundation included in this ICRMP provides guidance on carrying out the cultural resources management activities outlined in the Standard Operating Procedures. This document provides direction for routine activities that may have an impact on cultural resources, identifying various consultation requirements, and provides goals that would benefit the management of cultural resources at USAG-Pōhakuloa.

1. INTRODUCTION

1.1. ICRMP Purpose

There are over 40 separate statutes, regulations, or other binding guidance that set out multiple responsibilities of the United States Army Garrison, Pōhakuloa (USAG-Pōhakuloa) for cultural resources. The need for an Integrated Cultural Resource Management Plan (ICRMP) is established under Department of Defense Instruction (DoDI) 4715.16. Army Regulation (AR) 200-1 is the implementing regulation for Army Cultural Resources programs, including development of ICRMPs. ICRMPs integrate the entirety of the installation's Cultural Resources Management program with ongoing mission activities, and identify compliance actions necessary to maintain the availability of mission essential properties and areas. An ICRMP integrates the complex array of overlapping legal responsibilities into a coherent and efficient overall program. It integrates cultural resources responsibilities with the many other programs and activities that may interact with cultural resources and the people who care about them.

This ICRMP includes goals and priorities for effectively addressing the specific array of cultural resource management needs faced by USAG-Pōhakuloa. The ICRMP stands in support of the primary mission of USAG-Pōhakuloa and the military units that use the facilities. The practices and procedures outlined in the ICRMP minimize conflicts with the military missions supported by the Garrison.

The senior USAG-Pōhakuloa Archaeologist is appointed by the USAG-Pōhakuloa Garrison Commander as the Cultural Resources Manager (CRM) providing day-to-day oversight and coordination for the Cultural Resources Section at Pōhakuloa Training Area (PTA), Kīlauea Military Camp (KMC), and Kawaihae Military Reservation and provides cultural resources support for all three. These installations on the Island of Hawai'i are the subject of this ICRMP. There is a separate ICRMP document for U.S. Army Garrison, Hawai'i (USAG-HI) on Oahu. USAG-Pōhakuloa Commander has command and control authority for PTA as an indirect Garrison to USAG-HI. USAG-HI activities support USAG-Pōhakuloa staff with technical oversight as well as continued administrative and logistical support as USAG-Pōhakuloa grows its capabilities.

The CRM helps ensure that all installation activities are in compliance with applicable cultural resource requirements, serves as a liaison between all persons involved in implementing the ICRMP, and implements the Standard Operating Procedures (SOPs).

Updating the ICRMP

The ICRMP serves as a long-term planning framework for the Cultural Resources Management Section and is updated annually. The ICRMP may require a major revision if the current ICRMP has been in effect for five or more years, or if there have been any major changes in the USAG-Pōhakuloa mission or cultural resources management activities. If the ICRMP has been in effect for five years and there are no major changes, then the current ICRMP may stay in effect until an annual review determines the need for major revision.

1.2. Mission

US Army Pacific (USARPAC)

The U.S. Army, Pacific (USARPAC) is the Army component of the U.S. Pacific Command (USPACOM) in an area of heightened importance. USARPAC “postures and prepares the force for unified land operations, responds to threats, sustains and protects the force, and builds military relationships that develop partner defense capacity in order to contribute to a stable and secure United States Pacific Command area of responsibility” (U.S. Army Pacific 2016). USARPAC is headquartered at Fort Shafter, Hawai‘i in facilities managed by USAG-HI, and the USARPAC Commander is the Senior Commander for Army installations in the Pacific, including PTA. The area of responsibility for USARPAC covers more than 100 million square miles and includes 2.5 billion people in 50 countries.

USARPAC is responsible for commanding, equipping, stationing, and training all assigned or attached units and for wartime and peacetime contingency planning for Army forces in Hawai‘i, Alaska, Japan, and South Korea. USARPAC soldiers may find themselves deployed to any one of 42 self-governing nations, selected foreign territories, or 10 U.S. territories in the theater.

Other responsibilities include planning for mobilization, joint/combined exercises, security assistance, emergency evacuation of non-combatants, disaster relief, and civil disturbances. USARPAC also oversees, evaluates, and supports the Army National Guard in Hawai‘i, Alaska, and Guam and has command and control of the Army Reserve units in Saipan, Guam, American Samoa, Hawai‘i, and Alaska.

Installation Management Command–Pacific (IMCOM-PAC)

IMCOM-PAC is headquartered at Fort Shafter, Hawai‘i in facilities managed by USAG-HI. The USAG-Pōhakuloa Commander reports to IMCOM-PAC and USARHAW through USAG-HI Command. IMCOM-PAC has oversight of garrisons in Alaska, Hawai‘i, Japan, South Korea, and Kwajalein Atoll. The theater of operation for the U.S. Army Pacific Command is a large and complex area, which includes 43 countries, 20 territories and possessions, 10 U.S. territories, and five of the world’s largest foreign armies (IMCOM-Pacific 2016). IMCOM-PAC assists with the development and implementation of conservation programs. IMCOM-PAC reports to IMCOM Headquarters in San Antonio, Texas.

The Installation Management Command (IMCOM) currently manages over 75 Army installations distributed over four regions. IMCOM-PAC is headquartered at Fort Shafter, Hawai‘i, and is the direct reporting unit for USAG-HI.

IMCOM-PAC provides oversight of a myriad of multi-million dollar base operation support programs. IMCOM-PAC operations include management of active and reserve component installations providing support for soldiers, family members, and retirees, as well as civilians.

IMCOM Regional Directors direct and assist their installations in the conduct of Cultural Resources Management Programs.

U.S. Army Garrison, Hawai‘i (USAG-HI)

“Supporting each Warrior, Family and Community with sustainable services, ensuring power projection readiness from Hawai‘i” is the mission of U.S. Army Garrison, Hawai‘i (U.S. Army Garrison, Hawaii 2016).

USAG-HI manages all Army installations in Hawai‘i, providing installation management service and logistical support for approximately 93,700 Army and other military personnel, civilian personnel, military

retirees and their dependents, and others. USAG-HI manages a total of 22 sub-installations on the islands of O‘ahu and Hawai‘i. USAG-HI maintains oversight and support responsibilities for the subordinate, indirect garrison of USAG-Pōhakuloa on the Island of Hawai‘i, and jointly with USAG-Pōhakuloa, facilitates cultural resources responsibilities of the Army at Pōhakuloa Training Area (PTA), Kīlauea Military Camp (KMC), and Kawaihae Military Reservation.

While USAG-HI is responsible for basic support and management services, there are many other military commands and units working from within the installation. The activities and requirements of these units affect the demands facing cultural resources management within the Garrison jurisdiction. The USAG-HI Garrison Commander reports to both the Pacific Region of the Installation Management Command

U.S. Army Garrison, Pōhakuloa (USAG-Pōhakuloa)

The mission of USAG-Pōhakuloa is to provide support for single service, Joint, and Combined training to afford warfighters the most realistic and flexible training environment available in the Pacific Region.

The USAG-Pōhakuloa Commander has command and control authority for PTA as an Indirect Garrison to USAG-HI and reports to both the USARPAC Commander and IMCOM-PAC through USAG-HI Command and USARHAW. Pōhakuloa Training Area is the primary tactical training area that provides the U.S. Pacific Command (USPACOM) Commander with joint/multinational training capabilities to support home-station training, joint training, and enables theater regional engagements. As a remote location, PTA is ideally suited for emergency deployment readiness exercises (EDREs), regional Joint Reception, Staging, Onward movement and Integration (JRSOI) training, and multinational exercises in support of Theater Security Cooperation Programs (TSCP) and Shaping Operations.

USAG-HI activities support USAG-Pōhakuloa staff with technical oversight, as well as continued administrative and logistical support as USAG-Pōhakuloa grows its capabilities. USAG-Pōhakuloa also has oversight of KMC and Kawaihae Military Reservation and provides cultural resources support for both. The USAG-Pōhakuloa actively supports the following USAG-HI tenant activities, organizations, and units when they deploy to PTA for training. Tenants are required to notify the CRM of any potential changes to historic properties and to coordinate the National Historic Preservation Act (NHPA) Section 106 process through the USAG-Pōhakuloa Cultural Resources Section.

25th Infantry Division (25th ID)

The 25th Infantry Division (25th ID) is the major organization deployed forward in the Pacific region. Its mission is to conduct Decisive Actions in support of Unified Land Operations. The division conducts continuous persistent engagement with regional partners to shape the environment and prevent conflict across the Pacific Operational Environment (25th Infantry Division 2016). Also known as the “Tropic Lightning” Division and “America’s Pacific Division,” the unit stands ready to provide mission-tailored force packages to support the full range of operational requirements within the Pacific. The 25th ID also conducts partnered exercises and expert exchanges with various countries throughout the region to build partner capacity and interoperability.

Commands within the 25th ID consist of:

- 25th Headquarters and Headquarters Battalion
- 2nd Infantry Brigade Combat Team
- 3rd Infantry Brigade Combat Team

25th Combat Aviation Brigade
25th Sustainment Brigade
25th Division Artillery

U.S. Army, Hawaii (USARHAW)

Headquarters, Department of the Army (HQDA) has assigned the Senior Commander of the 25th Infantry Division (25th ID) the responsibility of coordination and providing support and prioritization to all Army units in Hawaii. The Senior Commander and the Headquarters staff addressing these responsibilities are U.S. Army, Hawaii (USARHAW). The mission of USARHAW is "prioritizing, directing, and synchronizing installation-level resources to assist commanders to prepare their units for assigned missions."

Other USAG-HI Tenant Commands and Units

8th Theater Sustainment Command
311th Signal Command (Theater)
94th Army Air & Missile Defense Command
Pacific Regional Medical Command & Tripler Army Medical Center
9th Mission Support Command
18th Medical Command
19th Military Police Battalion
500th Military Intelligence Brigade
599th Transportation Brigade
196th Infantry Brigade
U.S. Army Reserves
State of Hawai'i Army National Guard

Other Department of Defense Agencies: The U.S. Navy, U.S. Marine Corps, and the U.S. Air Force execute training exercises at PTA, including Air-to-Ground Gunnery exercises, maneuver, and live-fire exercises. The U.S. Marine Corps training asset inventory does not have adequate land resources to support all of their training requirements. Consequently, the Marine Corps utilizes Army training lands to meet their training requirements. These units have organic infantry, artillery, and aviation assets that train to similar standards as the Army. Navy fighter and attack aircraft crews train using PTA airspace. The Air Force also conducts C-17 heavy drops and high-altitude training runs.

Allied Armed Forces: Allied units deploying to Hawai'i for training match the size and mission tasks similar to 25th ID units and utilize PTA facilities.

State of Hawai'i Army National Guard: The Hawai'i Army National Guard (HIARNG) has two primary missions. The federal mission is to serve as an integral component of the Army by providing fully manned, operationally ready, and well-equipped units that can respond to any national contingency. The state mission of HIARNG is to provide a highly effective, professional, and organized force capable of supporting and assisting civilian authorities in response to natural disasters, human-caused crises, or the unique needs of the state and its communities. The National Guard, while a state organization, trains to the federal Army military standards.

Hawai'i Island Law enforcement: In 2012 and 2013, USAG-Pōhakuloa signed interagency agreements allowing the Hawai'i Department of Public Safety, the Hawai'i Police Department, and other public safety workers on Hawai'i Island to use PTA facilities.

1.3. Mission Activities of USAG-Pōhakuloa sub-installations

The USAG-HI currently manages 22 sub-installations on the islands of O’ahu and Hawai’i. Three (3) of these are located on Hawai’i Island, while the remaining nineteen (19) are located on O’ahu Island. PTA is the single largest U.S. Army holding in the state of Hawai’i at 132,000 acres. The majority of PTA was acquired through Presidential Executive Order 11167 (64 percent) and purchases (18 percent). The Ke’āmuku Parcel (Ke’āmuku Maneuver Area), a former Parker Ranch land holding managed by the Richard Smart Trust, was purchased in 2006.

USAG-Pōhakuloa Sub-Installations addressed in this ICRMP

Sub-Installation	Date Established	Date Acquired	Total Acres
Pōhakuloa Training Area (PTA) (incl. Ke’āmuku Maneuver Area [KMA])	Camp Pōhakuloa established by U.S. Military ca.1942	*	*
Kawaihae Military Reservation	1956	1956	11
Kīlauea Military Camp (KMC)	1916	1921	72 ¹
* Pōhakuloa includes training areas and a cantonment:			
Pōhakuloa Training Area (PTA)	1942 (see above)	1956	107,833
(Ke’āmuku Maneuver Area [KMA])		2006	24,043 (KMA)
Pōhakuloa Cantonment	1955-58	1956	124

Table 1: USAG-Pōhakuloa Sub-Installations

Pōhakuloa Training Area (PTA)

The mission of PTA is to provide military training opportunities for military personnel in preparation for deployment anywhere in the world, providing live fire and maneuver capabilities for the Army, law enforcement at all levels from county to federal agencies, and for other American and allied foreign military services.

PTA is divided into 24 training areas with live-fire and non live-fire fixed ranges, airborne drop zones, landing zones, field artillery and mortar firing points, and a centrally-located Impact Area. PTA contains a large Battle Area Complex (BAX) for battalion-size live-fire maneuvers, an infantry platoon battle course (IPBC), and a convoy live-fire area that supports mounted maneuver and live-fire training requirements (U.S. Army Garrison, Hawaii May 2016). All types of training actions are conducted at PTA, and the area provides realistic training for all branches of the U.S. military as a primary training area of the Pacific region. PTA helped prepare the 25th ID, Kaneohe-based Marines, and Hawai’i Army National Guard for combat operations in Iraq and Afghanistan. Included as part of PTA is the Ke’āmuku Maneuver Area (KMA), which was purchased from Parker Ranch in 2006 to increase mounted and dismounted maneuver training at PTA. The PTA area has been used for military training since WWII; the Army Training Area was established in 1956.

¹ 72-acres is reported in the HQIIS, but other Department of the Army datasets and NPS records report different acreages for KMC.

Pōhakuloa Cantonment

The Cantonment area of PTA comprises 124-acres with 120 buildings and structures, mostly Quonset huts, which are largely used for billeting, food preparation, storage, facilities maintenance, and administration. Approximately 190 personnel (civilian and military) are assigned to PTA on a permanent basis.

Bradshaw Army Airfield (BAAF) is adjacent to the Pōhakuloa Cantonment area. The airfield contains a runway and terminal facilities (control tower, airfield operations, weather forecasting and reporting, and crash rescue) to support transient aircraft for refuel, parking, and minor maintenance.

Kawaihae Military Reservation (Kawaihae Harbor)

The land encompassing Kawaihae Military Reservation is part of an area that historically served as a significant seaport and fishing site during the reign of Kamehameha I. Under the reign of Kamehameha I, the area supported a royal residence on the shore at Pelekane as well as Pu'ukoholā Heiau ceremonial site, both of which are outside of the Army's area of responsibility. The port also served as a significant site for the sandalwood trade and cattle industry. Kawaihae Military Reservation is the Army-controlled portion of Kawaihae Harbor that was established during WWII and has served as a docking center for troops and material moving to and from PTA.

Kīlauea Military Camp (KMC)

Kīlauea Military Camp (KMC) is located on 72 acres within Hawai'i Volcanoes National Park (HAVO).² The mission of KMC is to operate as a rest-and-recreation center for active duty and retired members of the Armed Forces, their families, and guests. The idea of Kīlauea as a national park was casually proposed as early as 1903, but it was not until 1910 that official interest from the territorial governor was transmitted to the Secretary of the Interior (Apple 1954). This was followed by a succession of bills to Congress in 1911, 1915, and 1916, to actually create the National Park. In October 1921, the Army took control of the area now known as KMC on the northern edge of Kīlauea Crater and it became the first U.S. Army installation on Hawai'i island, with the primary purpose of providing rest and recreation facilities for Army personnel. During WWII, the facilities were transformed into training camps, and in 1942 KMC served as the headquarters for the 27th Division. Several facilities also housed Japanese-American detainees and later served as a Prisoner-of-War camp (Tomonari-Tuggle and Slocumb 2000). KMC remains under the joint support of USAG-HI and USAG-Pōhakuloa under a Special Use Permit (SUP) from the National Park Service.

1.4. Management and Responsibilities

DoD policy and Army regulations call for installations and activities to develop and implement an ICRMP for use as a planning tool. These plans help ensure compatibility between the installation's military mission, other planned activities, and the management of its cultural resources. According to AR 200-1, *Environmental Protection and Enhancement*, the major goal of a Cultural Resources Management program is to "develop and implement procedures to protect against encumbrances to mission by ensuring that Army installations effectively manage cultural resources" (Department of the Army 2007).

AR 200-1 and DoDI 4715.16 create a framework for managing cultural resources at the installation level and support the Army in addressing its need to have a comprehensive historic preservation program. Therefore, the effective management of cultural resources, as exemplified by the development and

² 72-acres is reported in the HQIS, but other Department of the Army datasets and NPS records report different acreages for KMC.

Garrison-wide acceptance of this ICRMP, follows from federal laws, Army regulations, and from Federal Standards and Guidelines for federal historic preservation programs.

USAG-HI Garrison Commander

The USAG-HI Garrison Commander supports the USAG-Pōhakuloa Commander and PTA staff by supplying technical oversight and administrative and logistical support for USAG-Pōhakuloa (OPORD 48-10 2010).

USAG-HI Directorate of Public Works (DPW)

As head of the USAG-HI Directorate of Public Works, the Director of DPW provides technical oversight and logistical support for USAG-Pōhakuloa, as an indirect Garrison.

USAG-HI Environmental Division

The USAG-HI DPW Environmental Division is comprised of two branches; the Compliance Branch and the Conservation Branch. Both Environmental Division branches provide environmental guidance, support, and liaison services for USAG-Pōhakuloa as an indirect Garrison.

USAG-Pōhakuloa Garrison Commander

USAG-Pōhakuloa Commander has command and control authority for PTA as an indirect Garrison to USAG-HI. The USAG-Pōhakuloa Garrison Commander (GC) ensures that the Garrison meets the general cultural resources requirements assigned. As the leading authority in charge of cultural resources, the GC is specifically designated as the federal agency official for purposes of the National Historic Preservation Act (36 CFR §800), as the Federal Land Manager for purposes of the Archeological Resources Protection Act (32 CFR §229), as the Federal Agency Official with management authority over archeological collections and associated records (36 CFR §79), and as the Federal Agency Official for purposes of the Native American Graves Protection and Repatriation Act (43 CFR §10).

AR 200-1, Chapter 6, lists Garrison-wide tasks with respect to cultural resources. The lists from this regulation provide a succinct overview of the range of duties and requirements with respect to cultural resources management including, but not limited to, the following:

- Retain general oversight of cultural resources responsibilities.
- Assign operational responsibilities and monitor performance to assure that responsible parties appropriately and cooperatively carry out the tasks that fall within their spheres of authority and responsibility.
- Establish a process that requires installation staff elements, tenants, and other interested parties to coordinate with the CRM early in the planning of projects and activities to determine if any historic properties are, or may be, present that could be directly or indirectly affected by a project or activity. These elements include any training and testing activities, master planning, environmental impact analysis, or natural resources and endangered species management planning and programming.
- Establish and maintain appropriate consultative relationships with Native Hawaiian Organizations and other interested parties.
- Establish funding priorities and program funds for cultural resources compliance and management activities.

USAG-Pōhakuloa Cultural Resources Section

The Cultural Resource Manager (CRM) is the lead position within the USAG-Pōhakuloa Cultural Resources Section. The Cultural Resources Section staff includes both Department of the Army Civilian employees

and contracted support staff. USAG-HI Cultural Resources Section staff maintain oversight and support responsibilities for the subordinate, indirect garrison of USAG-Pōhakuloa, and with the Garrisons jointly facilitate cultural resources responsibilities of the Army on the Island of Hawai'i. Direct supervision of the USAG-Pōhakuloa CRM is provided by the USAG-Pōhakuloa Deputy Garrison Commander.

The general objectives of the USAG-Pōhakuloa cultural resources management program are:

- To eliminate impacts to the military missions arising from cultural resources issues;
- To meet compliance requirements in conjunction with other Garrison offices; and
- To identify, enhance, and implement program efficiencies.

Major Cultural Resources Section Responsibilities:

Inventory and Monitoring: Identify and document cultural resources, which also encompasses compiling and managing information about the resources. The Cultural Resources Section staff actively monitor historic property conditions to facilitate management.

Review of Projects/Undertakings/Actions for Compliance with Cultural Resources Requirements: The Cultural Resources Section maintains records of Garrison compliance with Section 106 of NHPA, NAGPRA, the archaeological permit standards of ARPA, and other cultural resources requirements for all actions or undertakings that have the potential to affect historic properties, archaeological resources, cultural items, or sacred sites. The Cultural Resources Section reviews proposed projects and actions beginning in early stages of planning to identify cultural resources issues and to inform the proponents regarding the requirements that may apply. The Cultural Resources Section advises proponents as to the most efficient and effective process through which the Garrison may achieve compliance with the cultural resources requirements applicable to specific undertakings.

Consultation and Public Participation: In many circumstances, consultations are required with Native Hawaiian Organizations, other agencies, and interested groups and individuals. DoDI 4710.03 directs the Garrison to maintain on-going consultative relationships with Native Hawaiian Organizations.

Information Management: The Cultural Resources Section must manage a complex set of interrelated information. Many of the records compiled by the Cultural Resources Section are permanent in nature and need appropriate long-term care.

Mitigation Implementation: The results of Section 106 or other compliance reviews often establish responsibilities to implement specific measures to avoid, minimize, or mitigate damage to cultural resources. The Cultural Resources Section implements many of these measures agreed to in consultation. Proponents and Project Managers may also be responsible for implementation of mitigation measures in coordination with the Cultural Resources Section.

Curation: Federal Regulation 36 CFR §79 establishes standards, procedures, and guidelines for preserving collections of prehistoric and historic material remains and associated records recovered under the authority of ARPA, NHPA, and other statutes so these collections may retain research and educational value indefinitely.

Research: Historical, cultural, and archaeological research all contribute to the documentation necessary for maintaining an accurate inventory record and for evaluating cultural resources significance.

Budgets, Work Plans, Project Funding Requests, and Contracts: The CRM develops budgets, annual work plans, and project funding requests for the Cultural Resources Section. The CRM develops and implements cooperative agreements and other contracts necessary to carry out the substantive tasks associated with cultural resources responsibilities of the Garrison. The U.S. Army Corps of Engineers, Honolulu District or other agencies administer many contracts for cultural resources tasks on behalf of project proponents or

on behalf of the Cultural Resources Section. These contracts often include archaeological survey, site documentation, monitoring, and building rehabilitation, or other tasks.

Internal Program Assessments: The Environmental Performance Assessment and Assistance System (EPAAS) maintains an extensive checklist of cultural resources requirements applicable to federal agencies in general, and another list addressing Department of the Army policies and direction with respect to those requirements. The CRM conducts an internal program assessment using these checklists and reports results through the Environmental Management System (EMS). Any findings of requirements not well addressed should result in a corrective action plan.

Track and Report Program Metrics for Data Calls: The Department of the Army and IMCOM periodically request a variety of data pertinent to cultural resources at Army Garrisons. The USAG-Pōhakuloa and USAG-HI CRMs compile the data and draft responses using the measures specified in the requests. Data calls from IMCOM or Department of the Army normally combine the data from USAG-HI and USAG-Pōhakuloa for reporting purposes.

Proponent for a Project, Action, or Undertaking

AR 200-1 defines “proponent” generally as “the unit, element, or organization that is responsible for initiating and/or carrying out the proposed action.” Those units or organizations that frequently plan and implement projects for construction, development, training, and maintenance at PTA are usually proponents of those projects for purposes of complying with Section 106 of the National Historic Preservation Act. Proponent organizations include, but are not limited to:

- USARHAW Integrated Training Area Management (ITAM)
- USARHAW Training Support Systems
- USAG-HI DPW Master Planning Branch
- USAG-HI DPW Utilities
- USAG-HI DPW Job Order Contract managers
- USAG-HI Directorate of Plans, Training, Mobilization & Security (DPTMS)
- USAG-HI and USAG-Pōhakuloa DPW Engineering Divisions
- USAG-HI and USAG-Pōhakuloa Troop Construction project managers
- Managers of other contracted work
- U.S. Army Corps of Engineers
- Military units

Proponents must be *active* agents in the consideration of cultural resources pertinent to their projects in order for the Garrison to achieve compliance. Proponents must be prepared to justly consider altering project plans and parameters responsive to comments and concerns raised during consultations. Project managers implementing a project must be prepared to enforce the terms of all agreements reached for cultural resources protection during the planning process. Proponents cannot rely on the Cultural Resources Section to achieve compliance on their behalf without the active collaboration of the proponent throughout the project planning. Whichever office or individual assumes proponent responsibilities for a project, action, or undertaking, that proponent typically has the following responsibilities as noted in AR 200-1, implementing regulations for NHPA (36 CFR §800), and Army regulations for implementing National Environmental Policy Act (NEPA) (32 CFR §651.4):

- Notice to the CRM of a proposed action or undertaking and its full known scope **early in the planning processes.**
- Participate in defining the Area of Potential Effects for the undertaking

- Assure that funding and support for identification of historic properties, assessments of effect, and implementation of mitigation measures are incorporated into project proposals and budgets
- Supply information needed by the CRM for official correspondence
- Assure that NEPA and NHPA compliance are properly coordinated
- Incorporate any restrictions or agreement stipulations resolving cultural resources issues into project designs, contracts, construction inspections, standard operating procedures for units, and other project oversight.
- Keep written record of Section 106 completion and any resulting conditions or agreements applicable to the project.
- Notify CRM of any material change to the project scale, scope, design parameters, timing, or other circumstances to assess whether the changes affect the Section 106 compliance status at any stage of project planning or implementation.
- Notify the USAG-Pōhakuloa CRM and the USAG-HI DPW when the implementation of the project appears not to be in accord with, or lacking any of the provisions upon which, the Section 106 resolution is contingent.

1.5. Partnerships

USAG-Pōhakuloa and USAG-HI maintain partnerships with outside agencies concerned with cultural resources management. Outside agencies are those organizations, stakeholders, or interested parties that are directly involved with cultural resource management on Army landholdings. As stated in DoDI 4715.16, “Consult in good faith with internal and external stakeholders and promote partnerships to manage and maintain cultural resources by developing and fostering positive partnerships with Federal, tribal, State, and local government agencies; professional and advocacy organizations; and the general public” (Department of Defense 2008). USAG-HI Cultural Resources Section consults with the following organizations:

Advisory Council on Historic Preservation

The Advisory Council on Historic Preservation (ACHP) is an independent Federal agency created by the NHPA, and is the major policy advisor to the Government in the field of historic preservation. The ACHP is composed of nineteen Members. A small professional staff serves it with offices in Washington, DC. The Advisory Council may choose to participate in the development of agreement documents. Disputes regarding a federal agency’s completion of Section 106 responsibilities may also be referred to the Advisory Council.

National Park Service

The National Park Service (NPS) participates in cultural resources management at both the national and local levels. The Western Regional Office (WRO) has oversight of historic preservation offices in the western continental United States and the Pacific; in this latter role WRO has been reviewing agreement documents signed by the State Historic Preservation Division (SHPD). WRO also participates in Section 106 consultations for undertakings that may affect National Historic Landmarks (NHLs). There are no NHLs under Army control on Hawai’i Island, but Pu’u Kohola Heiau is adjacent to Kawaihae Harbor and the Mauna Kea Adze Quarry is above PTA near the summit of Mauna Kea.

Hawai’i Volcanos National Park (HAVO) owns the land on which Kīlauea Military Camp (KMC) on Hawai’i Island is situated and, therefore, has some ongoing responsibility for the management and care of cultural resources on that installation. The HAVO Superintendent has approval authority over major undertakings that may have an effect on cultural resources. A cultural resource specialist with the National Park Service provides professional expertise and is the point-of-contact for the CRMs at USAG-HI and USAG-Pōhakuloa.

The NPS also oversees The Secretary of the Interior’s Standards for the Treatment of Historic Properties.

Hawai’i State Historic Preservation Division (SHPD)

State Historic Preservation Offices (SHPOs) were established under the National Historic Preservation Act of 1966 (NHPA). Federal agencies are required to consult with the SHPO and obtain concurrence on determinations of eligibility and effect. The Chairperson for the Hawai’i State Department of Land and Natural Resources (DLNR) is officially designated as the State Historic Preservation Officer for purposes of NHPA. The Administrator for the State Historic Preservation Division (SHPD) within DLNR serves as the Deputy SHPO and directs a professional and technical staff that carries out the regular duties on behalf of the SHPO.

Historic Hawai'i Foundation

The Historic Hawai'i Foundation was founded in 1974 to preserve Hawai'i's unique architectural and cultural heritage. The organization is an interested party in cultural resource management issues on USAG-Pōhakuloa lands, especially with respect to historic buildings and districts.

Hawai'i State Office of Hawaiian Affairs (OHA)

The Office of Hawaiian Affairs (OHA) is an agency of the State of Hawai'i, specifically formed to ensure the perpetuation of the culture, the enhancement of lifestyle, and protection of entitlements of Native Hawaiians. OHA functions operationally as a State government agency with a strong degree of autonomy and as a trust. As a part of its mission, OHA participates in consultations regarding cultural resources that hold cultural or religious significance to Native Hawaiians. OHA is a source of expertise and advice regarding values and significance that may be embodied in specific cultural resources, and regarding the other Native Hawaiian organizations and individuals that may wish to participate in specific consultations. Federal laws and regulations requiring federal agencies to consult with Native Hawaiian Organizations specifically designate OHA as one of the organizations that must be included in such consultations.

Native Hawaiian Organizations

Hawai'i Island Burial Council (HIBC)

The State of Hawai'i established a burial council for each of the major Hawaiian Islands (Hawai'i Revised Statute (HRS) 6E-43.5). These councils have oversight within State of Hawai'i law and regulations to assure that Native Hawaiian burials affected by projects, receive appropriate respect, proper handling and treatment, and proper final disposition. The five Island Burial Councils are supported administratively through the State Historic Preservation Division. Council members are appointed by the Governor and confirmed by the Senate for a four year term.

USAG-Pōhakuloa includes HIBC in consultations regarding burials, as a source of expertise and advice regarding appropriate values and sensitivities related to burials, and for help seeking potential claimants or cultural descendants affiliated with specific burials. Council members meet once a month to address concerns related to Native Hawaiian burial site issues for Hawai'i Island and often participate in consultations where burials are known or likely to occur within the area of potential effect for a proposed undertaking or project under Garrison jurisdiction.

Other Native Hawaiian Organizations

There are a large number of Native Hawaiian Organizations (NHOs) and groups throughout the Hawaiian Islands that serve and represent the interests of Native Hawaiians for a variety of purposes. The Department of Interior maintains a Native Hawaiian Organizations Notification List website for Federal and State agencies seeking to comply with consultation requirements pursuant to Federal law. The list is updated periodically and available at <https://www.doi.gov/hawaiian/NHOL>.

DoDI 4710.03 provides formal policy guidance with respect to consultations with Native Hawaiian Organizations. It acknowledges the special status of NHOs in Federal laws, states a DoD-wide policy of meaningful consultations, and directs that on-going consultative relationships be maintained with Native Hawaiian Organizations.

1.6. Statutes, Regulations, and Guidelines

Statutes, regulations, and guidelines pertaining to the management of cultural resources under U.S. Army Garrison, Pōhakuloa (USAG-Pōhakuloa) stewardship.

Federal Statutes

Name	Citation	Common Abbreviation
Abandoned Shipwreck Act of 1987	43 U.S.C. § 2101-2106	
American Indian Religious Freedom Act of 1978, as amended	42 U.S.C. § 1996-1996a	AIRFA
Americans with Disabilities Act of 1990	42 U.S.C. § 12101	ADA
Antiquities Act of 1906, as amended	54 U.S.C. § 320301-320303	
Archaeological and Historic Preservation Act of 1974, as amended	54 U.S.C. § 312501-312508	AHPA
Archaeological Resources Protection Act of 1979	16 U.S.C. § 470aa-470mm	ARPA
Coastal Zone Management Act of 1972	16 U.S.C. § 1451-1456	CZMA
Historic Sites Act of 1935, as amended	54 U.S.C. § 320101-320106, 102303, 102304, 309101	HSA
National Environmental Policy Act, as amended	42 U.S.C. § 4321-4370c	NEPA
National Historic Preservation Act of 1966, as amended	54 U.S.C. § 300101 et seq.	NHPA
Native American Graves Protection and Repatriation Act of 1990	25 U.S.C. § 3001-3013	NAGPRA
Public Buildings Cooperative Use Act	40 U.S.C. § 3306	PBCUA
Religious Freedom Restoration Act	42 U.S.C. § 2000bb	RFRA

Abandoned Shipwreck Act of 1987 (43 U.S.C. § 2101-2106)

The Abandoned Shipwreck Act establishes ownership and preservation responsibilities for abandoned shipwrecks in the waters of the United States.

American Indian Religious Freedom Act, as amended (42 U.S.C. § 1996-1996a)

The American Indian Religious Freedom Act (AIRFA) states that it is the policy of the United States to “protect and preserve for American Indians their inherent right of freedom to exercise the traditional religions of the American Indians, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonial and traditional rites.” AIRFA promotes consultation and guarantees access to traditional sites located on federal lands and a non-interference with religious practices.

Americans with Disabilities Act of 1990 (42 U.S.C. § 12101)

The Americans with Disabilities Act (ADA) is a wide-ranging legislation intended to establish a clear and comprehensive prohibition of discrimination on the basis of disability. It establishes standards for accessibility for public buildings in regard to entryways, restrooms, and other issues. Accessibility to properties open to the public, including historic properties, is a civil right.

Antiquities Act of 1906 (54 U.S.C. § 320301-320303)

The Antiquities Act authorizes the President to designate historic and natural resources located on federally owned or controlled land as National Monuments and provides protection for archaeological resources. The act provides protection to prehistoric and historic ruins and objects by providing criminal sanctions against excavation, injury, or destruction of those resources without the use of a federal permit.

Archaeological and Historic Preservation Act of 1974 (54 U.S.C. § 321501-312508)

The Archaeological and Historic Preservation Act (AHPA) or Moss Bennet Act provides for the preservation of historical and archaeological data (including relics and specimens) that might otherwise be lost as the result of the construction of a dam or any alteration of the terrain resulting from federal construction project or federally licensed activity or program.

Archaeological Resources Protection Act of 1979 (16 U.S.C. § 470aa-470mm)

The Archaeological Resources Protection Act (ARPA) secures the protection of archaeological resources and sites on public lands and Indian lands and fosters increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data obtained before the date of the enactment. Unauthorized excavation, removal, damage, alteration, or defacement of archaeological resources on public lands is prohibited. ARPA sets forth criminal and civil penalties for such violations. The act requires a permit for any excavation or removal of archaeological resources from public lands not sponsored by the federal agency. ARPA identifies information about the location and nature of archaeological resources as sensitive information that may not be made available to the public unless such disclosure furthers the purposes of ARPA and does not create a risk of harm to the resources. Such information may be shared with State agencies dependent upon a commitment to protect the confidentiality of the information.

Coastal Zone Management Act of 1972 (16 U.S.C. § 1451-1466)

The Coastal Zone Management Act (CZMA) established laws and state coastal zone management programs designed to protect, preserve, and restore important ecological, cultural, historic, and esthetic values of our Nation's coastal communities and zones.

Historic Sites Act of 1935 (54 U.S.C. § 320101-320106, 102303, 102304, 309101)

The Historic Sites Act (HSA) declares it is a national policy to preserve, for public use, historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States. National Historic Landmarks may be designated by action of the Secretary of the Interior under authority of this law independently of National Register consideration. National Historic Landmarks, when so designated, are considered automatically listed in the National Register of Historic Places with National level of significance, per regulations implementing the National Register. The two designations are legally distinct.

National Environmental Policy Act (42 U.S.C. § 4321-4370c)

The National Environmental Policy Act (NEPA) requires all federal agencies to prepare a document, most commonly an Environmental Assessment (EA), which assesses the potential impacts of any proposed action on the environment, including impacts to cultural resources. If impacts are judged potentially significant, an Environmental Impact Statement (EIS) must be prepared. An EIS identifies any unavoidable adverse environmental effects, as well as alternatives to the proposed action, prior to its implementation. This process compels informed decision-making by federal agencies and their departments by requiring consideration of all relevant environmental consequences of proposed actions and involving the public in the decision-making process. As our basic national charter for protection of the environment, NEPA establishes policy, sets goals (Section 101), and provides means (Section 102) for carrying out the policy. Section 102(2) contains action-forcing provisions to make sure federal agencies act according to the letter and spirit of the Act. NEPA procedures must ensure environmental information is available to public officials and citizens before decisions are made and before actions are taken.

National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.)

The National Historic Preservation Act (NHPA) establishes the federal historic preservation program including expansion and maintenance of a National Register of Historic Places (Section 101), requires all federal agencies to take into account the effects of their actions on the Nation's historic properties (Section 106), and directs federal agencies to assume responsibility for the preservation of historic properties that are owned or controlled by such agency (Section 110). NHPA also establishes the State Historic Preservation Offices, the Advisory Council on Historic Preservation, the National Register of Historic Places, and federal agency Historic Preservation programs. NHPA further notes that the historical and cultural foundations of the country should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people.

Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. § 3001-3013)

The Native American Graves Protection and Repatriation Act (NAGPRA) protects Native American burial sites and regulates the removal of human remains, funerary objects, sacred objects, and objects of cultural patrimony on federal, Native American, or Native Hawaiian Home Lands during planned or unanticipated excavations. NAGPRA requires federal agencies and museums receiving federal funds to inventory holdings for such remains and objects and work with tribal groups and Native Hawaiian Organizations in a consultation process to reach agreements on the repatriation, transfer or other disposition of the remains and objects. This act provides for the determination of custody, protection, and repatriation of Native American human remains, associated and unassociated funerary objects, sacred objects, and objects of cultural patrimony. It ensures the respectful treatment of these remains and objects and minimizes their exploitation prior to repatriation.

Public Buildings Cooperative Use Act (40 U.S.C. § 3306)

The Public Buildings Cooperative Use Act (PBCUA) directs federal agencies to acquire and use space in suitable buildings of historic, architectural, or cultural significance, and to encourage public access to and community use of public buildings for cultural, educational, and recreational activities.

Religious Freedom Restoration Act (42 U.S.C. § 2000b)

The Religious Freedom Restoration Act (RFRA) ensures interests in religious freedom are protected, including access to sacred land and sites. Government activity may substantially burden a person's free

exercise of religion only if the activity is in furtherance of a compelling governmental interest and is the least restrictive means of furthering that interest.

Executive Orders

Name	Citation	Date
Protection and Enhancement of the Cultural Environment	EO 11593	13 May 1971
Locating Federal Facilities on Historic Properties in Our Nation's Central Cities	EO 13006	21 May 1996
Indian Sacred Sites	EO 13007	24 May 1996
Preserve America	EO 13287	3 March 2003
Federal Real Property Asset Management	EO 13327	6 February 2004

EO 11593 – Protection and Enhancement of the Cultural Environment

Requires agencies of the executive branch of the Government to administer the cultural properties under their control in a spirit of stewardship and trusteeship for future generations; initiate measures that facilitate the preservation, restoration, and maintenance of federally owned sites, structures, and objects of historical, architectural, or archaeological significance; and, in consultation with the Advisory Council on Historic Preservation (ACHP), to institute procedures to assure that federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures, and objects of historical, architectural, or archaeological significance.

EO 13006 -- Locating Federal Facilities on Historic Properties in Our Nation's Central Cities

Encourages the use of suitable historic buildings of national, cultural, or architectural significance for federal facilities.

EO 13007 – Indian Sacred Sites

Requires executive agencies with administrative responsibility of federal land management to accommodate access to and ceremonial use of Indian sacred sites and avoid adversely affecting the physical integrity of sacred sites. Sacred sites may be eligible for the National Register of Historic Places.

EO 13287 – Preserve America

Establishes that the federal government shall recognize and manage the historic properties in its ownership as assets that can support department and agency missions while contributing to the vitality and economic wellbeing of the Nation's communities.

EO13327 -- Federal Real Property Asset Management

Mandates that general real property planning and management incorporates processes responsive to the requirements of EO 13287, which promotes long-term preservation and use of historic real property assets, including a descriptive database with the historic status codes of all real property.

Presidential Memoranda

Subject	Date
Government to Government relations with Native American Tribal Governments	29 April 1994

Government-to-Government Relations with Native American Tribal Governments

Recognizes the unique political relationship between the United States Government and Native American tribal governments. Executive departments and agencies are given principles that reaffirms them to conduct their activities in a manner respectful to the rights of self-government and self-determination with federally recognized tribal governments.

Federal Regulations

Citation	Title	Issuing Agency
15 CFR 930	Federal Consistency with Approved Coastal Management Programs	National Oceanic and Atmospheric Agency
32 CFR 229	Protection of Archaeological Resources (Note: Uniform ARPA regulations appear in four separate locations in the CFR, once for each agency mandated to issue enforcing regulations. See 32 CFR 229 for Department of Defense; 36 CFR 296 for Department of Agriculture; 43 CFR 7 for Department of the Interior; and 18 CFR 1312 for the Tennessee Valley Authority. Supplemental regulations appear with Dept. of Interior version).	Department of Defense
32 CFR 651	Environmental Analysis of Army Actions (AR 200-2)	Department of the Army
36 CFR 60	National Register of Historic Places	Department of Interior, National Park Service
36 CFR 63	Determinations of Eligibility (for National Register of Historic Places)	Department of Interior, National Park Service
36 CFR 65	National Historic Landmarks	Department of Interior, National Park Service
36 CFR 67	Historic Preservation Certifications Pursuant To Sec. 48(G) And Sec. 170(H) Of The Internal Revenue Code Of 1986	Department of Interior, National Park Service
36 CFR 68	Secretary of the Interior's Standards for Treatment of Historic Properties	Department of Interior, National Park Service
36 CFR 78	Waiver of Federal Agency Responsibilities, Under Section 110 of the National Historic Preservation Act	Department of Interior, National Park Service

36 CFR 79	Curation of Federally Owned and Administered Archaeological Collections	Department of Interior, National Park Service
36 CFR 800	Protection of Historic Properties	Advisory Council on Historic Preservation (ACHP)
36 CFR 1911	Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities;	Department of Justice and Department of Transportation
40 CFR 1500-1508	Regulations For Implementing the Procedural Provisions of the National Environmental Policy Act	Council on Environmental Quality
43 CFR 3	Preservation of American Antiquities	Secretary of Agriculture, Secretary of the Army, Secretary of the Interior
43 CFR 7	Protection of Archaeological Resources: Uniform Regulation (Subpart A) and Supplemental Regulation (Subpart B)	Secretary of the Interior
43 CFR 10	Native American Graves Protection and Repatriation Regulations	Secretary of the Interior

National Oceanic and Atmospheric Agency, Federal Consistency with Approved Coastal Management Programs, 15 CFR 930

Describes the obligations and roles of all parties who are required to comply with the federal consistency requirement of the CZMA and assigns responsibilities.

Department of Defense, Protection of Archaeological Resources, 32 CFR 229

Implements provisions of ARPA by establishing the uniform definitions, standards, and procedures to be followed by all federal land managers in providing protection for archaeological resources on public lands and Indian lands of the United States. Establishes prohibited acts, criminal penalties, and excavation permit and collection procedures.

Department of the Army, Environmental Analysis of Army Actions (AR 200-2), 32 CFR 651

Implements NEPA, setting forth Army’s policies and responsibilities for the early integration of environmental consideration into planning and decision making.

Department of the Interior, National Register of Historic Places (NRHP), 36 CFR 60

Sets forth the procedural requirements for listing properties on the National Register of Historic Places (NRHP) and authorizes the Secretary of the Interior to expand and maintain a National Register of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.

Department of the Interior, Determinations of Eligibility for Inclusion in the National Register of Historic Places (NRHP), 36 CFR 63

Formal process for resolving questions or disputes regarding the eligibility of properties for inclusion in the National Register of Historic Places.

Department of the Interior, National Historic Landmark Program, 36 CFR 65

Facilitates identification and designation of National Historic Landmarks (NHLs), and encourages the long-range preservation of nationally significant properties that illustrate or commemorate the history and prehistory of the United States. These regulations set forth the criteria for establishing national significance and the procedures used by the Department of the Interior for conducting the NHL Program.

Department of the Interior, Historic Preservation Certifications Pursuant to Sec. 47(G) and Sec. 170(H) of the Internal Revenue Code of 1986, 36 CFR 67

Established the program authority and function of Section 47 of the Internal Revenue Code which designates the Secretary of the Interior as the authority for the issuance of historic district statutes and of State and local historic districts, certifications of significance, and certification of rehabilitation in connection with certain tax incentives involving historic preservation.

Department of the Interior, Secretary of the Interior's Standards for the Treatment of Historic Properties, 36 CFR 68

Establishes standards for the treatment of historic properties including standards for preservation, rehabilitation, restoration, and reconstruction projects.

Department of the Interior, Waiver of Federal Agency Responsibilities Under Section 110 of the National Historic Preservation Act, 36 CFR 78

Authorizes the Secretary of the Interior to promulgate regulations under which the requirements in Section 110 may be waived in whole or in part in the event of a major natural disaster or an imminent threat to the national security.

Department of the Interior, Curation of Federally-Owned and Administered Archaeological Collections, 36 CFR 79

Establishes definitions, standards, procedures, and guidelines to be followed by federal agencies to preserve collections of prehistoric and historic material remains, and associated records, recovered under the authority of the Antiquities Act, the Reservoir Salvage Act (now the AHPA), the NHPA, or ARPA.

Advisory Council on Historic Preservation, Protection of Historic Properties, 36 CFR 800

Outlines how federal agencies carry out consultation responsibilities under Section 106 of the NHPA. It defines the roles of the ACHP, the State Historic Preservation Officer, the Tribal Historic Preservation Officer, and interested parties.

Department of Justice and Department of Transportation, Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities, 36 CFR 1191

Provides regulations allowing for the sensitive accessibility of historic buildings.

Council on Environmental Quality, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR 1500-1508

Provides regulations applicable to and binding on all federal agencies for implementing the procedural provisions of the NEPA, except where compliance would be inconsistent with other statutory requirements.

Secretary of Agriculture, Secretary of the Army, and Secretary of the Interior, Preservation of American Antiquities, 43 CFR 3

Places responsibility for ruins, archaeological sites, historic and prehistoric monuments and structures, objects of antiquity, historic landmarks, and other objects of historic and scientific interest on the Secretaries of Agriculture, Army, and Interior on federal lands that fall under their respective jurisdictions. Sets forth the types of permits that may be granted, to whom, and restrictions and requirements for authorized organizations who have obtained a permit for the examination of ruins, the excavation of archaeological sites, and the gathering of objects of antiquity.

Secretary of the Interior, Protection of Archaeological Resources, 43 CFR 7

43 CFR 7 Subpart A implements provisions of ARPA by establishing uniform definitions, standards, and procedures to be followed by all federal land managers in providing protection for archaeological resources located on public lands and Indian lands of the United States. 43 CFR 7 Subpart B includes Supplemental Regulations for the Department of the Interior (DOI) regarding determination of loss or absence of archaeological interest as well as permitting and collection procedures.

Department of the Interior, Native American Graves Protection and Repatriation Act Regulations, 43 CFR 10

Outlines the provisions and regulations of NAGPRA and provides a process for determining the rights of lineal descendants and Indian Tribes and Native Hawaiian Organizations to certain Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony with which they are affiliated.

Department of Defense Instructions and Guidance

Item	Title	Date
DoD Instruction 4710.03	Consultation with Native Hawaiian Organizations	25 October 2011
DoD Instruction 4715.16	Cultural Resources Management	18 September 2008

Department of Defense Instruction 4710.03: Consultation with Native Hawaiian Organizations

Provides policy and guidance and assigns responsibilities for DoD consultation with NHOs when proposing actions that may affect a property or place of traditional of traditional religious and cultural importance to an NHO.

Department of Defense Instruction, 4715.16, Cultural Resource Management

Establishes DoD policy and assigns responsibilities for the integrated management of cultural resource on DoD managed lands.

U.S. Army Regulations and Guidance

Item	Title	Date
AR 200-1	Environmental Protection and Enhancement	13 December 2007
AR 210-20	Real Property Master Planning for Army Installations	16 May 2005
AR 350-19	The Army Sustainable Range Program	30 August 2005
Headquarters Memorandum	Historic Property Guidance	27 December 2016

Department of the Army, Army Regulation 200-1 -- Environmental Protection and Enhancement (AR 200-1)

This regulation implements federal, state, and local environmental laws and DoD policies for environmental management, including cultural resources, to meet legal compliance requirements and to support the Army mission. Cultural resources are specifically defined as:

- Historic properties as defined in the National Historic Preservation Act (NHPA),
- Cultural items as defined in the Native American Graves Protection and Repatriation Act (NAGPRA),
- Archaeological resources as defined in the Archaeological Resources Protection Act (ARPA),
- Sacred sites as defined in Executive Order (EO) 13007 to which access is provided under the American Indian Religious Freedom Act (AIRFA), and
- Collections as defined in 36 CFR §79, Curation of Federally-Owned and -Administered Collections.

Requirements set forth in the National Environmental Policy Act (NEPA) of 1969 as amended, NHPA, ARPA, NAGPRA, AIRFA, 36 CFR 79, EO 13007, EO 11593, and Presidential Memorandum on Government-to-Government Relations with Native American Tribal Governments, define the basis of the Army's compliance responsibilities for management of cultural resources. Regulations applicable to the Army's management of cultural resources include those promulgated by the Advisory Council on Historic Preservation (ACHP) and the National Park Service (NPS).

Department of the Army, Army Regulation 210-20 – Real Property Master Planning for Army Installations (AR 210-20)

This regulation defines the real property master planning concept and requirement. It establishes policies, procedures, and responsibilities for implementing the real property master planning process. It specifies procedures for Real Property Master Plan (RPMP) development, approval, update, and implementation. It continues the requirement for the installation of Real Property Planning Boards. It also establishes a relationship between environmental planning and real property master planning in order to ensure that the environmental consequences of planning decisions are addressed. It establishes the requirement for complying with environmental documentation procedures. As such, it requires the inclusion of contributory sources of RPMP information, one of which is the ICRMP.

Department of the Army, Army Regulation 350-19 -- The Army Sustainable Range Program (AR 350-19)

This regulation defines the Integrated Training Area Management (ITAM) program's objectives as achieving optimal sustained use of lands for training and testing, integrating Army training and other mission requirements for land use with sound natural and cultural resources management, and advocating proactive conservation and land management priorities. It requires that the ITAM program be included in the INRMP and ICRMP to ensure the both plans reflect mission requirements for ranges and training lands.

Department of the Army, Headquarters Memorandum, Historic Property Guidance

This memorandum, dated 27 December 2016, provides policy, guidance, processes, and best practices for integrating historic property management with mission activities having the potential to affect historic properties and other cultural resources. The guidance implements the most current version of AR 200-1.

USAG-HI Regulations and Guidance

Item	Title	Date
USAG-HI-10	Environmental Policy	19 May 2014
USAG-HI-30	Standard Physical Termite Barrier Guidance for Sustainment, Restoration, Renovation, Modernization and Military Construction Projects	24 July 2015
USAG-HI-63	Landscaping with Native Plants	04 June 2014
USAG-HI-210-15	Disposition of Temporary World War II-Era Wooden Buildings	25 June 2009

Environmental Policy (USAG-HI-10)

Provides formal written environmental policy that also facilitates the incorporation of the 17 mandatory elements of the International Organization for Standardization 14001. Environmental Management system throughout the Garrison.

Standard Physical Termite Barrier Guidance for Sustainment, Restoration, Renovation, Modernization and Military Construction Projects (USAG-HI-30)

Sets the standard in regard to physical and chemical termite barrier methods and treatment standard used during construction, restoration, renovation, and modernization of facilities. These standards apply to historic buildings, and installation of physical barriers has the potential to adversely effect historic properties.

Landscaping with Native Plants (USAG-HI-63)

Establishes the policy of using local native plants to reduce the influx of invasive species, reduce water requirements, provide habitat for animals, and create a Hawaiian Landscape on post. This policy shall also apply in cases of cultural landscapes.

Disposition of Temporary World War II-Era Wooden Buildings (USAG-HI Regulation 210-15)

Establishes the procedures for the demolition of temporary facilities, especially those identified as World War II temporary wooden buildings, pursuant to the Programmatic Memorandum of Agreement for Demolition of WWII Temporary Buildings.

Secretary of the Interior’s Standards and Guidelines

The National Historic Preservation Act (NHPA) tasked the Secretary of the Interior to provide guidance and to set standards for federal agencies to use in fulfilling the purposes set forth in that statute. The Secretary of the Interior issued the following sets of standards and guidelines responsive to that task. These acts include preservation, rehabilitation, restoration, and reconstruction.

Item	Source											
Archaeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines (9/29/1983)	48 Federal Register (FR) 44716-44740, 29 September 1983											
<table border="1"> <tr><td>Standards and Guidelines for Preservation Planning</td></tr> <tr><td>Standards and Guidelines for Identification</td></tr> <tr><td>Standards and Guidelines for Evaluation</td></tr> <tr><td>Standards and Guidelines for Registration</td></tr> <tr><td>Note on Documentation and Treatment of Historic Properties</td></tr> <tr><td>Standards and Guidelines for Historic Documentation</td></tr> <tr><td>Standards and Guidelines for Architectural and Engineering Documentation</td></tr> <tr><td>Standards and Guidelines for Archaeological Documentation</td></tr> <tr><td>Standards and Guidelines for Historic Preservation Projects</td></tr> <tr><td>Qualification Standards</td></tr> <tr><td>Preservation Terminology</td></tr> </table>	Standards and Guidelines for Preservation Planning	Standards and Guidelines for Identification	Standards and Guidelines for Evaluation	Standards and Guidelines for Registration	Note on Documentation and Treatment of Historic Properties	Standards and Guidelines for Historic Documentation	Standards and Guidelines for Architectural and Engineering Documentation	Standards and Guidelines for Archaeological Documentation	Standards and Guidelines for Historic Preservation Projects	Qualification Standards	Preservation Terminology	Current version available at: http://www.nps.gov/history/local-law/arch_stnds_1.htm
Standards and Guidelines for Preservation Planning												
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Standards and Guidelines for Historic Preservation Projects												
Qualification Standards												
Preservation Terminology												
The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act (“Section 110 Guidelines”)	63 FR 2049-20508, 24 April 1998 Web version: https://www.nps.gov/history/fpi/Section110.html											

The Secretary of the Interior’s Standards for Preservation

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Preservation focuses on the maintenance and repair of existing historic materials and retention of a property’s form as it has evolved over time.

The Secretary of the Interior’s Standards for Rehabilitation

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property’s historic character.

The Secretary of the Interior’s Standards for Restoration

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods.

The Secretary of the Interior’s Standards for Reconstruction

This standard is one of four distinct, but interrelated, approaches to the treatment of historic properties. Reconstruction re-creates vanished or non-surviving portions of a property for interpretive purposes.

Archaeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines

These are general guidance issued by the Secretary of the Interior to promote effective and consistent historic preservation efforts by all federal agencies. They offer advice regarding appropriate professional practice for the general kinds of historic preservation tasks entailed by the NHPA – Planning, Identification, Evaluation, Registration, Documentation, and Implementation of Preservation Projects.

The Secretary of the Interior’s Standards and Guidelines for Federal Agency Historic Preservation Programs pursuant to the National Historic Preservation Act

These standards and guidelines are usually called “the Section 110 guidelines.” They describe the necessary components of the full program mandated in Section 110 of the NHPA.

Advisory Council on Historic Preservation

Item	Source
Consultation with Native Hawaiian Organizations in the Section 106 Review Process: A Handbook, June 2011	http://www.achp.gov/Native%20Hawaiian%20Consultation%20Handbook.pdf
NEPA and NHPA: A Handbook for Integrating NEPA and Section 106, March 2013	http://www.achp.gov/docs/NEPA_NHPA_Section_106_Handbook_Mar2013.pdf

Consultation with Native Hawaiian Organizations in the Section 106 Review Process: A Handbook

This handbook from the Advisory Council on Historic Preservation states the current advice from the Council as to best practices for consulting with Native Hawaiian Organizations as required to comply with Section 106 of the National Historic Preservation Act.

NEPA and NHPA: A Handbook for Integrating NEPA and Section 106 March 2013

Provides advice on implementing provision added to the Section 106 regulations in 1999 that address the coordination of the Section 106 and NEPA reviews and the substitution of the NEPA reviews for the Section 106 process.

State of Hawai'i Statutes and Rules

These statutes and rules do not uniformly apply to actions by Federal agencies with respect to historic properties. However, Hawai'i Revised Statutes (HRS) governing the treatment and disposition of Native Hawaiian human remains are germane to NAGPRA compliance and to consultations with Native Hawaiian Organizations and individuals.

These statutes and associated rules also set up the Hawai'i Register of Historic Places with criteria materially similar though not identical to the criteria for inclusion in the National Register of Historic Places. USAG-Pōhakuloa should reasonably expect SHPD, acting in its capacity as the SHPO for the State of Hawai'i, to offer comments, advice, and opinions for Federal undertakings informed by the standards, definitions, and practices defined in these State authorities.

The following list of Hawai'i Revised Statutes (HRS) and Hawai'i Administrative Rules (HAR) are provided for reference purposes only and are therefore not described in detail.

Title	Reference
Prehistoric and Historic Burial Sites	HRS Section 6E-43
Inadvertent Discovery of Burial Sites	HRS Section 6E-43.6
Island Burial Councils; creation; appointment; composition; duties	HRS Section 6E-43.5
Rules Governing Procedures for Historic Preservation Review for Government Projects covered under 6E-7 and 6E-8, HRS	HAR 13-275, § 13-275
Rules Governing Standards for Archaeological Inventory Surveys and Reports	HAR 13-276, § 13-276
Rules Governing Requirements for Archaeological Site Preservation and Development	HAR 13-277, § 13-277
Rules Governing Standards for Archaeological Data Recovery Studies and Reports	HAR 13-278
Rules Governing Standards for Archaeological Monitoring Studies and Reports	HAR 13-279
Rules Governing Procedures for Inadvertent Discoveries of Historic Properties During a Project Covered by Historic Preservation Review Process	HAR 13-280
Rules Governing Professional Qualifications	HAR 13-281
Rules Governing Permits for Archaeological Work	HAR 13-282
Rules Governing Standards for Osteological Analysis of Human Skeletal Remains	HAR 13-283
Rules Governing Procedures for Historic Preservation Review to Comment on Section 6E-42, HRS Projects	HAR 13-284
Rules of Practice and Procedure Relating to Burial Sites and Human Remains	HAR 13-300

2. GEOGRAPHIC AND CULTURAL CONTEXTS

2.1. Geographic Context

Hawaiian Islands

The Hawaiian Islands are an archipelago of 132 islands, reefs, seamounts, and shoals in a 1,523 mile northwest-southeast alignment in the middle of the Pacific Ocean. It is almost 2,500 miles from the nearest landfall with the west coast of the U.S. mainland.

Eight islands make up almost 99 percent of the total land area of the island chain. Situated at the southeastern end of the archipelago, each of the main islands is a volcanic remnant that has been eroded by a combination of wind, rain, streams, and waves. The age of the islands trends from the southeast, so that Hawai'i, the largest island of the chain, is the youngest and is still volcanically active, and Kaua'i and Ni'i'hau are the oldest and most eroded.

The islands were once characterized by distinct natural vegetation zones that have since been transformed by human use and modifications, beginning with the earliest Polynesian settlers of the islands (see Juvik and Juvik 1998 for a graphical comparison of the native island ecosystems before human settlement and at present). Based largely on rainfall and elevation, these vegetation zones have been reconstructed based on existing vegetation, remnant native vegetation in disturbed areas, climatic patterns, and paleoenvironmental research.

Windward vegetation zones include lowland and montane sub-zones. The montane zone extends into mountain bogs that occur in very wet, poorly-drained areas near mountain summits (Cuddihy and Stone 1990). The native lowland wet forest would have been dominated by 'ohi'a (*Metrosideros polymorpha*) or koa haole (*Leucana glauca*), with an understory of native trees such as kōpiko (*Psychotria spp.*) and hame (*Antidesma platyphyllum*), the 'ie'ie vine (*Freycinetia arborea*), and a variety of ferns (depending on specific geographic locations). The native montane wet forest zone would have been dominated by a close-canopied 'ohi'a forest with a well-developed understory of mixed native tree species, shrubs, and tree ferns. Bog vegetation is characterized by sedges and grasses (Mueller-Dombois and Fosberg 2013).

Leeward vegetation is similarly divided into lowland and upland sub-zones. The native lowland dry zone would have been an open parkland type of forest, with extensive grasslands and shrubs (Kirch 1985). The forest would have included wiliwili (*Erythrina sandwicensis*), naio (*Myoporum sandwicensis*), lama (*Diospyros ferra*), 'ohe (*Reynoldsia sandwicensis*), and sandalwood/'iliahi. (*Santalum spp.*). Grasslands would have included pili (*Heteropogon contortus*) as well as endemic grasses that now have a much more restricted range. The native upper dry forest would have been dominated by koa, with an understory of shrubs and vines (Mueller-Dombois and Fosberg 2013). On the Island of Hawai'i elevations exceed those in the most of the archipelago. Sub-alpine and alpine zones are present in these higher elevations. PTA is within the sub-alpine zone and the vegetation is dominated by mamane (*Sophora chrysophylla*), naio and 'ohi'a trees.

Geographic Context of Hawai'i

The Island of Hawai'i is the largest of the Hawaiian archipelago, but is one of the least densely occupied. The urban hubs are Hilo on the east coast and Kailua-Kona on the west coast. Much of the remainder of the island encompasses volcanic ranges, lava flows, and agricultural and pasture lands. A number of federal and state land management agencies administer large tracts on Hawai'i Island, including the National Park Service (Hawai'i Volcanoes National Park, Pu'ukohola Heiau National Historical Park, Kaloko-

Honokohau National Historical Park, Pu‘u Honua o Honaunau National Historical Park, and Ala Kahakai National Historical Trail), the U.S. Military (see below), the Department of Land and Natural Resources, the Department of Hawaiian Home Lands, and the Office of Hawaiian Affairs.

Army sub-installations on Hawai‘i Island are as follows: Pōhakuloa Training Area (PTA) in the Saddle Region; Kīlauea Military Camp (KMC) in the summit region of Kīlauea Volcano; and Kawaihae Military Reservation on the leeward west coast of the Island of Hawai‘i.

The island is composed of five volcanoes, of which two (Mauna Loa and Kīlauea) remain active; a third volcano (Hualālai) last erupted in 1801 and, while presently dormant, may erupt again (Macdonald, Abbott, and Petersen 1983). Mauna Kea is a dormant volcano and is the highest point in the state, standing at 13,796 feet above mean sea level (amsl). Mauna Loa is an active shield volcano and is 13,677 feet amsl (Juvik and Juvik 1998, Tilling, Heliker, and Swanson 2010).

The island coastline is considerably rockier than on O‘ahu, with extensive stretches of sheer sea cliffs, particularly along the windward coast. There are few and localized occurrences of sandy beaches, and virtually no major fringing reef on the island. The coastal embayments at Hilo on the windward coast and at Kealahou and Kawaihae on the leeward coast offer the few protected anchorages on the island.

Typical windward coastal amphitheater-headed valleys occur only in the northern part of the island at the present Kohala Mountain. Kohala is the oldest volcano on Hawai‘i Island and is now dormant (Lamb et al. 2007). To the south along the Hāmākua coast, narrow, steep-sided gulches, separated by broad, undivided ridges, emanate out of the more recent Mauna Kea summit.

Kawaihae Military Reservation is on the leeward west shore of the island at Kawaihae Bay. The bay lies at the base of the southwestern slopes of the ancient Kohala Volcano, from which its volcanic soils derive. The leeward side of the Kohala Mountain drops in a relatively steep and undissected slope to a rocky coastline. There are few widely spaced erosional gullies; two gullies drain into Kawaihae Bay at the southern end of the modern harbor.

At the center of the island is the high-elevation Saddle Region or interior plateau, formed by the convergence of lavas from Mauna Kea, Mauna Loa, and Hualālai. Most of PTA is located on the Saddle, at elevations from about 5,000 to 8,800 feet amsl. The northwest portion of PTA, the Ke‘āmuku Maneuver Area, extends from 5,000 to 2,500 feet amsl on the northwest leeward slope of Mauna Kea. Large areas of the Saddle are *pāhoehoe* and *‘a‘ā* lava flows from Mauna Loa. The flows contain subsurface features such as lava tubes and lava blisters; the lava tubes form extensive and sometimes interconnected networks of underground passageways that are accessed from the surface by collapsed openings. Other volcanic constructs in the Saddle Region include *pu‘u* (spatter or scoria cones). Older lava flow surfaces are preserved in *kīpuka*, which are islands of pre-existing terrain and vegetation surrounded by more recent lava flows. Mauna Kea eruptions are represented by sediment covered flows with some lava tubes and *pu‘u*, some of which are now surrounded by Mauna Loa flows.

KMC lies in the summit region of the Kīlauea Volcano, at about 4,000 feet above sea level (asl). The volcano is the youngest and most active of the volcanoes that make up the island. From 1823 to 1924, the Halema‘uma‘u pit crater within Kīlauea was continuously active, with lava at times filling the entire floor of the main crater. From 1924 to the present, activity has been sporadic, but with periodic fiery displays. In the immediate vicinity of KMC (which is the only Army installation in the summit region of the volcano) no new lava has flowed during recorded times, although debris from explosive eruptions in 1790 and 1924 are scattered around the rim.

2.2. Cultural Context

The cultural context is presented in two major sections. The background section summarizes information related to Hawai'i in general, including mythological beginnings, island colonization, and general patterns of development. The subsequent section deals with the pre-contact period of Hawai'i Island with specific emphasis on the areas in which USAG-Pōhakuloa installations are located.

Background

The history of the islands prior to European contact is based on a vast body of traditional Hawaiian material recorded in the nineteenth and early twentieth centuries, and on archaeological research that was particularly intensive over the last 40 years. Hawaiian chronology derives from these two types of data. Traditional Hawaiian histories and royal genealogies are used for one framework, employing specific numbers of years (varying from 20 to 30) per genealogical generation (Fornander 1969, Stokes 1930, Hommon 1976, Johnson 1994, Cordy 1996b, Masse and Tuggle 1998). The archaeological chronology is based on radiocarbon dating. Where possible, research on pre-contact Hawaiian history has integrated these two sources of dating (Emory 1959, Hommon 1976, Tuggle 1979, Cordy 2000, 1996b). During the late 1990s and early 2000s archaeologists working on Hawai'i became aware of several in-built errors within radiocarbon dating from specific types of materials. Given these insights the archaeological chronology across Hawai'i is being revised. The cultural historic development of the islands has not yet been revised to match the revised radiometric chronology that is being developed.

Mythological Beginnings

There is no single origin myth in Hawaiian traditions. Instead, there are numerous traditions concerning creation, island origins, the coming of the gods, and migrations. Traditions concerning island origins are found in the works of such Hawaiian writers as Malo (1951, 1996) and Kamakau (1991), as well as numerous authors in the Fornander collection (1969). Analyses of origin and migration traditions are found in nineteenth-century writings such as Fornander's 1878 and 1880 works (1969) and continue to be carried out (Barrere 1969, Cachola-Abad and Kahaunani 1993, Tuggle 2000, Cordy 2000). It is clear that the traditional literature is a rich body of metaphorical and historical complexities.

Initial Colonization of the Hawaiian Islands

The date of initial island colonization has perhaps been the point of greatest disagreement among archaeologists working in Hawai'i. The following discussion is provided to contextualize the past 50 years of archaeological research in Hawai'i. The two main positions on the issue of Hawai'i's colonization have been labeled the "long count" and the "short count" (Graves and Addison 1995). Those favoring the long count have argued for settlement as early as A.D. 100-300 (Hunt and Holsen 1991, Kirch 2000, Cordy 2000), with those favoring the short count argue for colonization no earlier than A.D. 700-800 (Spriggs and Anderson 1993, Athens and Ward 1993, Masse and Tuggle 1998, Tuggle and Spriggs 2001, Kirch 2011, Kirch and McCoy 2007). However, recent research throughout the Hawaiian Islands has led to the general conclusion that the initial colonization of the Hawaiian Islands took place between AD 800 and 1200 (Kirch 2011, Wilmshurst et al. 2011, Dye 2011, 2014, 2015, Dye and Pantaleo 2010, Athens, Rieth, and Dye 2014), but further research is needed to narrow this date range, and reanalyze all previously dated sites. This date range stems from advances in scientific understanding of the factors influencing the results of radiocarbon dating. The effects of using long-lived species or "old" wood for radiocarbon dating has generally been resolved with the application of stringent 'chronometric hygiene' protocols (Rieth 2011, Kirch 2011, Dye 2015). The importance of the date of colonization lies in the implications for rates of population growth, patterns of settlement expansion, rates of cultural change, and single versus multiple voyages to Hawai'i. The subject of a single voyage or multiple voyages has not been readdressed since consensus was reached on the more recent colonization dates. On this last point, some favor only one

voyage of colonization (Cordy 2000), while others support the episodic migration hypothesis (Cachola-Abad and Kahaunani 1993, Anderson, Chappell, and Grove 2006, Bellwood 2013).

A less contentious point is the area of Hawaiian origin, which is generally believed to have been the Marquesas Islands (Cordy 2000, Kirch 2000, Van Tillburg 2003, McGregor 2007), however this conclusion rests on very limited data (Allen 2014).

General Patterns of Cultural Development

The cultural development periods discussed below have not yet been revised in the cultural resources management literature to reflect the updated radiocarbon chronology discussed above. Kirch and McCoy (2007) suggest the substitution of the Colonization Period (c. A.D. 800-1000) and the Developmental Period (c. A.D. 1000-1200) with the Foundation Period (c. A.D. 800-1200) until research is conducted to allow for the accurate differentiation between these periods. The discussion below outlines the basic structure of cultural development that is still used in the academic literature.

The model of Hawaiian cultural development based on the chronologies of longer duration (Tuggle 1979, Kirch 1985, Cordy 2000, McGregor 2007) emphasizes early settlement in the rich windward environments and later expansion into the drier leeward regions. Expansion of the population into other parts of the islands was associated with population growth and increasing political complexity. The patterns of settlement have not changed with the chronology, and similar processes may still be used to explain the observed changes with the shorter chronology.

The Development Period was characterized by the emergence of Hawaiian culture in distinct patterns. Linguistic and cultural changes took place that were uniquely adapted to the Hawaiian Islands (McGregor 2007). The society developed into an organized, self-sufficient subsistence social order with extended sovereign control over the archipelago of Hawai'i. The communal social system centered on providing subsistence to large, extended, multigenerational families. Hawaiian spiritual life focused on maintaining harmonious relationships with nature and the deities. The period of major population growth and settlement expansion associated with the Expansion Era in the longer chronology, from about A.D. 1150 to 1400 (Dye and Komori 1992, Dye 1994, McGregor 2007), may actually represent initial settlement within the context of the shorter chronology (Dye 2011). The revised chronology may indicate that political complexity and large polities began to develop during the period of initial settlement in the islands. Genealogical evidence from Hawaiian traditions indicates that it was during this era that powerful lineages of the kings of O'ahu (the Maweke line) and Hawai'i (the Pili line) were founded. Archaeologically, this was the initial period of large temple construction, development of royal centers, and agricultural expansion and intensification (Kolb 1991, Dye 1994, Cordy 1995, 1996a, b, 2000). Alternative hypotheses pose that (a) environmental change or (b) the introduction of sweet potato (*Ipomoea batatas*) was a critical factor in the development or intensification of the large dryland field systems of leeward Hawai'i (Rosendahl and Yen 1971, Yen 1974). The revised chronology makes it likely that the sweet potato was introduced during initial settlement.

Agricultural expansion and population growth continued over the next centuries, until at least A.D. 1700. The extent to which population and agricultural development had stabilized, or perhaps even declined, during the century before European contact is still being investigated (Tuggle 1979, Kirch 1984, Dye and Komori 1992, Dye 1994, Ladefoged, Graves, and McCoy 1996, Cordy 2000). In any case, the settlement pattern of the islands that was described at the time of contact had been clearly established by A.D. 1700, including population centers, royal centers, temples, and expansive dryland and irrigation agricultural field systems (Armstrong 1973, Tuggle 1979, Juvik and Juvik 1998).

Traditions and archaeology indicate periods of intensive warfare and political expansion in the final century of Hawaiian cultural development before European contact in 1778, at which time there were

four competing kingdoms. The kingdom of Hawai'i (Hawai'i Island and a section of Maui) was ruled by Kalani'ōpu'u. The kingdom of Maui (Maui, Lāna'i, and Kaho'olawe) was under Kahekili. The kingdom of O'ahu (O'ahu and Moloka'i) was under the rule of Peleioholani. Kaua'i and Ni'ihau were the realm of Kaneoneo.

Traditional Hawaiian Context

Hawaiian Cultural Context: Hawai'i

The most recent colonization dates for Hawai'i Island are between AD 1220-1260, which are generally 200-400 years later than the generally accepted date range (Rieth 2011). This date range also complements other recent studies: a bayesian analysis by Dye (2015) and a high-precision radiocarbon dating study by Wilmshurst et al. (2011). Many of the previous discussions on the initial colonization of Hawai'i Island were split into the two camps (discussed above). The dates discussed below all rely on a very stringent chronological hygiene protocol that rejects anything other than charcoal of short lived species (Kirch 2011). Given a need to re-date many archaeological sites the following discussion relies predominantly on studies conducted prior to the current consensus and revised sampling protocols.

The model of early windward settlement of the island remains largely untested, with very little work conducted in predicted locations of early occupations. Hunt and Holsen (1991) identified no sites that date prior to A.D. 1000 in the windward area. The earliest sites date to the A.D. 1000-1400 range and are located in Honopūe Valley on the windward Kohala coast (Tuggle 1979, Cordy 1994). To date, only one site dates to an earlier range (A.D. 784-1187), and it is in the Waimanu Valley on the windward Kohala coast (Shun and Schilz 1991, Cordy 1994).

A few sites on Hawai'i Island have been radiocarbon dated to between A.D. 600-900 (Hunt and Holsen 1991). This may affirm the evidence for scattered settlement over various parts of the island during the A.D. 900-1100 era, including the beginnings of cultivation in the leeward regions (Cordy 2000), but the radiocarbon dates for many of these sites have not been reassessed based on the current understanding of radiocarbon dating concerns.

Hawai'i Island's population, settlements, and cultivated areas expanded rapidly until A.D. 400. Some radiocarbon dates from the upland saddle and montane regions (Cordy 1994) indicate activity as early as about A.D. 1000-1100, including initial use of the massive basalt quarry complex on Mauna Kea (McCoy 1978). There is evidence of relatively frequent visits to the region to access unique vegetation, birds, and stone resources up to about A.D. 1400. These radiocarbon dates are based on unidentified charcoal samples and the sites have not been reevaluated.

Traditions suggest that the A.D. 1150-1400 period was one of competing district-sized chiefdoms. In general, there were three centers of power during this period: Waipi'o Valley in the windward region, Kona in the leeward area, and Kohala on the northern end of the island. Toward the end of this period, traditions identify a new social order created through the actions of the priest Pā'ao and the empowerment of the Pili lineage (Fornander 1969, Hommon 1976, Cachola-Abad and Kahaunani 1993, Cordy 2000). Hilo was also a center of power on Hawai'i Island, though oral histories influenced by the Kamehameha family tend to minimize the importance of this record. Kirch (2010) emphasizes the kingdom of Kona and the lineage that Kamehameha I traced his ancestry through; while Cordy (2000) provides a more balanced representation of the traditional history of Hawai'i Island, including the 'I family of Hilo.

There is evidence that some form of island political consolidation occurred under Pili and his successors, although this appears to have varied in strength and cohesiveness. By the time of Līloa in the late A.D. 1500s, there was at times a single ruler with jurisdiction over the entire island. It appears that the massive

dryland agricultural field systems of Kona and Kohala had been extensively developed by this time period, matching the growth of large population centers along the leeward coast of the island. In the early 1600s, Līloa's son, 'Umi, moved the royal center to leeward Kona from its ancient location in windward Waipi'o Valley (Fornander 1969, Cordy 2000).

The trajectory of Hawai'i's population and subsistence in the A.D. 1700s remains uncertain. The *ali'i* (hereditary line of rulers) sponsored or required large construction projects during this period, including possible fishpond construction and certainly the rededication and expansion of major temples, to support their positions and advance their political aspirations (Kamakau 1961). The temple construction was primarily related to an era of intensive warfare, which involved some internal conflict, but was mainly between island kingdoms. At the time of European contact in 1778, the two powerful kings of Hawai'i and Maui were involved in a protracted war.

Western Contact Context

When Captain James Cook arrived in Hawai'i in 1778, the Native Hawaiian population was estimated at 400,000 to 800,000 (Kirch and Rallu 2007). Beginning early in the contact period, foreigners began staying on the islands, and in the process the introduction and gifting of western crops, animals, and products to the islands began. The westerners also brought new diseases such as cholera, whooping cough, dysentery, venereal diseases, measles, influenza, and bubonic plague that raged as epidemics, decimating Hawaiian communities (McGregor 2007).

The course of Hawaiian history was significantly altered by these cumulative events in the late 18th century. Direct Western contact, while 'minimal' at times, was constant and ever-increasing. Hawai'i became a regular stop for British, American, and Russian trading vessels crossing the Pacific after 1786 with the development of the fur trade on the northwest coast of North America. Beginning in this early phase, Hawaiians began to travel aboard western ships, engaging with and learning western techniques and technologies.

Inter-Island Wars of Conquest

The history of Inter-Island Wars of Conquest are varied and complex, yet this account will generally touch on the actions of Kamehameha I. The early life of Kamehameha I is largely unknown, yet traditional narratives tell that he was separated from his parents early in life, and that he was raised in the *ali'i* class from which he was chosen for training as a warrior. By the landfall of Captain Cook, Kamehameha had already begun rising in rank and influence, yet it was not until 1782 that he officially began taking steps to consolidate power and influence (Cordy 2000). During Kamehameha I's quest for island unification in the late eighteenth century, he amassed and moved huge armies through many staging points, battles, and battle aftermaths. Several of the USAG-Pōhakuoa installations fall in areas that felt the tread of Kamehameha's army.

Over a period of 12 years, Kawaihae experienced a massive influx of population related to Kamehameha's ascendancy to power. In 1790, several events occurred that allowed Kamehameha to begin consolidating his power: the appropriation of two British ships: the *Eleanor* and the *Fair American* along with the imprisonment of their captains; his marriage to Kalola, a high-ranking woman from Moloka'i; and the initiation of construction of Pu'ukoholā, the heiau where he ultimately solidified his conquest of the island with the sacrifice of his adversary Keōua in the temple dedication (Kuykendall 1938). Kamehameha also maintained a residence at Pelekane in Kawaihae, just north of Pu'ukoholā and inland of Kawaihae Military Reservation.

From around 1793, John Young, an American advisory to Kamehameha, resided at Kawaihae with the task of supervising the construction of Kamehameha's war fleet in preparation for the invasion of Kaua'i

(Sahlins 1992). By the time Kamehameha embarked on the invasion in 1802, he had 7,000 to 8,000 warriors under his command. Such numbers suggest that the use of the Kawaihae coast as a staging area resulted in increased pressure on local resources (Kirch and Sahlins 1992).

The constant state of inter-island wars ended in 1802 with a complete consolidation of power under Kamehameha, excepting Kauaʻi, which would transfer peacefully to Kamehameha's Kingdom in 1810. For a more detailed review of the Inter-Island Wars and the life of Kamehameha I refer to (Cordy 2000).

Nineteenth Century Context

The nineteenth century historic context presents a general framework for understanding the cultural resources of the Monarchy period in Hawaiian history. This section summarizes the nineteenth century history of the islands, focusing on some of the critical factors that resulted in a transformation of the Hawaiian landscape. These factors include: the finalization of the inter-island wars that culminated in Kamehameha's unification of the islands, the effects of westernization on settlement and land use (primarily through the introduction of new economies, such as ranching, commercial agriculture, and new technologies), and especially by the drastic change in the concept of land ownership brought about by the mid-nineteenth century Māhele.

Background

The 1800s served as a transformative period for Hawaiʻi. The final battles of the Inter-Island Wars were fought in 1802, with the complete consolidation of power in Kamehameha I's Kingdom by 1810. Given the shifting balance of power within and between the Hawaiian Islands the court of Kamehameha I moved many times during his reign from Hawaiʻi to Oʻahu, where he first settled at Waikīkī and then moved to Honolulu then back to Hawaiʻi Island before his death. The capitol later shifted to Maui before moving back to Honolulu in 1845.

In the aftermath of Kamehameha's death in 1819, the traditional kapu system was overthrown and abandoned. The rebellious factions tended to blame foreign influence and change. These influences and changes would become exacerbated following the arrival of missionaries in 1823. The missionaries held a precarious place in Hawaiian society having been welcomed by the Hawaiian chiefs, accepted by the rulers, and yet would become generally distrusted. The relationships between Hawaiians and westerners devolved over the century, becoming precarious in the mid to late nineteenth century.

During the first half of the century, the intensification of commercial agriculture resulted in new waves of immigrants. The change in the land tenure system in 1848 (the Māhele) served as a significant turning point in Hawaiian land ownership. The new system provided for western style individual fee land ownership that encouraged western-style development of agricultural business, further impacting Hawaiian lifestyles and land use.

The physical landscape of the islands was inexorably transformed. The introduction of cattle to Hawaiʻi in the late 1700s had a horrific effect. With a kapu in place for the first decade, cattle were allowed to range free, and subsequently ran amok in native gardens and across the native forests (see discussion below). The sandalwood trade of the first three decades of the nineteenth century had an equally devastating effect on the landscape. Used for wood and incense in China, the supply of sandalwood was soon stripped from the mountains. The need for firewood in urban areas and as part of the whaling industry had similar impacts. Frequent forest burning and cutting in the relentless quest for sandalwood (*ʻiliahī*) (Chamberlain 1957, Kirch and Sahlins 1992) and firewood (Cuddihy and Stone 1990), combined with the effects of free-ranging cattle and use of bark in tanning hides, resulted in massive deforestation and erosion. Commercial agriculture in the second half of the century spread sugarcane, pineapple, and other cash crops across the landscape (Kirch and Sahlins 1992).

In the first half of the nineteenth century, the Hawaiian government moved from a highly stratified political order dominated by island and inter-island kings, to a constitutional monarchy reflecting a restructuring of the Hawaiian political order within a western framework. During this transition, several changes took place, including Kamehameha's complete unification of the islands, the rejection of the kapu system, and the premiership of Ka'ahumanu (Seto Levin 1968). By the mid-century, the Māhele had introduced fee simple land ownership, which further encouraged westerners to develop agricultural lands and encouraged Hawaiians to seek income from their land. The century ended with the overthrow of the monarchy and eventual annexation by the U.S. government (Kirch and Sahlins 1992).

Land Changes

Due to an increase in Euro-American immigration, together with western economic and land use practices, the local landscape was significantly affected. Natural resources of the islands were sometimes commercialized to devastating effect on both the resource and the Hawaiian population. Some of the most notable examples are sandalwood, timber for firewood, *pulu*, and native birds (Chamberlain 1957, Ellis 1963, Kuykendall 1938, Glidden 1998, Olson 1941).

In the first half of the nineteenth century Hawai'i was introduced to westernized commercial crops such as Irish potatoes and western vegetables. Many of these crops were grown to supply passing ships, especially whaling ships. For a brief period, crops were exported to California to support the gold rush. During the second half of the century the sugar industry took root. The town of Hilo on Hawai'i Island became the islands' second largest city as a result of the sugar industry on the Hilo-Hāmākua coast.

In 1793, Captain George Vancouver introduced cattle to Hawai'i and Kamehameha immediately instituted a kapu on the animals for a period of ten years. The animals became a serious problem as they survived and reproduced handsomely in the wild. Bullock hunting began in the early 1800s, and by the 1820s, it was an industry, with commodities of hides and tallow for local use and export, and salted and barreled beef for the growing provisioning trade related to Pacific whaling (Kirch and Sahlins 1992). On the Island of Hawai'i, the processing of cattle mostly took place in the Waimea region, but Hilo also saw substantial trade in hides, jerked meat, and tallow (McEldowney 1979). During the period of 1815-1848, the emphasis in cattle management was on hunting the animals as if they were wild animals and not on animal husbandry. Vaqueros from Mexico were brought to Hawai'i to hunt the cattle for the Crown and teach Hawaiians cattle management techniques. Management policy during this period was largely based on the traditional Hawaiian management of wild resources through the use of *kapu*. The government continued to appoint individuals to manage the government cattle in the area through the 1850s. After managing fish ponds for Kamehameha I and later hunting bullocks for the Crown, John Palmer Parker established a cattle ranch in Puu Kapu Ahupua'a in 1847 (Bergin 2004, Maly and Maly 2002).

Like cattle, goats and sheep were introduced to Hawai'i in the late eighteenth/early nineteenth centuries and, in some instances, became a serious threat to the health of the island environment. Following the Mahele, companies were established that managed the feral cattle, sheep and goats. Some, like Parker's operation, were based on privately owned land while others depended upon land leased from the Government, the King, and private landowners. All operations had some leased lands due to the requirements of cattle grazing. Most of the operations managed several different types of animals, although the Humu'ula Sheep Company focused on sheep. Global events influenced the fortunes of the operations, including the American Civil War which created a demand for wool from the Northern States and the collapse of the whale oil market in 1864 that led to the demise of the whaling fleet. The Waimea Grazing and Agriculture Company, established in 1861, was significantly affected by the collapse of the whale oil market and sold its final assets in 1877 after a severe drought.

Volcano Tourism

In the nineteenth century, the Kīlauea summit region became a popular tourist site. The volcano region was visited as early as the 1820s by western missionaries and Navy crew (Olson 1941) and quickly became a destination for sightseers, explorers, and scientists. As tourism developed in the region, the old Hawaiian trail from Kau to Hilo was transformed from a well-worn path to a road, and by 1894 an improved road from Hilo to the volcano was completed (Olson 1941).

The area of Kīlauea was proposed as a national park as early as 1903, and in 1910 the territorial governor expressed official interest in the park's formation (Apple 1954). In 1916, a congressional bill was passed that defined the boundaries of the National Park, but allowed only the acquisition of territorial lands. KMC was also established in 1916. In 1920, Congress authorized the military acquisition of the private lands (U.S. Congress 1920). As a result, in October 1921, the Army took control of KMC and it became the first U.S. Army installation on the island, with the primary purpose of providing rest and recreation facilities for Army personnel.

Urbanization

In the early nineteenth century, Hilo became a small center of Hawaiian political and economic realms. Like Honolulu, it had a protected harbor in which foreign vessels could safely anchor. During the height of the whaling period, it was the third most frequented port-of-call (after Honolulu and Lahaina) for food resupply and firewood (Kirch and Sahlins 1992). After the sugar industry developed, the town grew to be the second largest in the islands, acting as a business hub for the numerous plantations along the Hilo-Hamakua coast as well as a transport center for incoming supplies and equipment and outgoing crops. Although not as prominent, Kawaihae served as a major shipping point on the leeward coast (Duperrey 1819).

Army installations in these urban areas include the Keaukaha Military Reservation in Hilo and Kawaihae Military Reservation at Kawaihae. The Keaukaha facility is managed by the National Guard and is not addressed in this document.

Land Use Changes

In the mid-nineteenth century, the Hawaiian population was greatly diminished by disease, low birth rates, and outmigration. Commoners who were awarded family lands struggled to hold on to their property. These circumstances encouraged the fee simple ownership and the Māhele. In 1845, the Hawaiian government began changing land tenure that eventually instituted private, fee simple ownership of land. The Māhele of 1848 divided all lands in the islands among the King (Crown Lands), the government (Government Lands), and 245 chiefs (Māhele Lands) (Banner 2005, Kirch and Sahlins 1992). Each relinquished their rights to the others' lands. A government resolution in 1849 allowed commoners to make claims to lands that they used. In 1850, foreigners were given the right to own land (Banner 2005).

These property changes are manifested in the landscape and can be seen in the house lots (often walled), agricultural fields, house gardens, and boundary markers that are directly linked to claims and testimonies of the Land Commission and the Boundary Commission (Banner 2005, U.S. Congress 1920, Kirch and Sahlins 1992).

With the transition to private land ownership, delineation of boundaries became critical. Land boundaries were established by survey, but during the Māhele there were no established reference points on which to base surveys. In 1870, the Kingdom of Hawai'i established the Hawai'i Government Survey to construct a correct general map of the Kingdom, to permanently fix with the greatest possibly accuracy a large number of points of reference for use in local surveys, and to produce a map of each district to give an

exact representation of the contents and boundaries of its principal subdivisions. The Hawai'i Government Survey pursued these goals until the islands were annexed by the United States in 1898. The Survey established a geodetic grid across the main islands of the archipelago that provided accurate reference points for subsequent surveys.

Twentieth Century Context

The Twentieth century context, between 1900 and 1989, is largely an extension of the changes that began in the Nineteenth century. With significant changes in land ownership and use stemming from the Māhele of 1848, large tracts of land were converted for specific agriculture and ranching enterprises in the form of plantations. As these industries continued to flourish during the first half of the twentieth century, plantation and ranch owners sought cheap immigrant labor to support the growing agricultural businesses. For instance, pineapple production expanded from 2,000 cases in 1903 to 12,808,000 cases in 1931, while sugar exports rose from 289,500 short tons in 1900 to 939,300 short tons in 1930.

In the 20th century, cattle became more valuable for their meat than for tallow and hides. Ranchers imported stock to improve the meat, and took steps to improve the fodder available to the cattle through range management and the introduction of grasses. Management techniques changed the nature of the landscape. The diverse ethnic groups that worked on the ranches contributed to the development of the unique Hawaiian *paniolo* culture. Technological changes throughout the 20th century continued to change the way in which ranch operations were conducted, as well as the nature of the infrastructure. Global market changes also affected the operation of ranches on Hawai'i Island.

Military Context

The military historic context presents a framework for understanding the cultural resources of twentieth-century Hawai'i, emphasizing the presence of the U.S. Army on the islands. A primary model for the context is R. Goodwin and Associates, Inc. (1995).

Prelude to the Army in Hawai'i

In 1872, Major General John M. Schofield, Commander of the Army Division of the Pacific, came to Hawai'i on a mission to evaluate the defense possibilities of various Hawaiian ports (Alvarez 1982). Recognizing the potential importance of Pu'uloa Lagoon as a harbor that could be inexpensively and effectively defended, he recommended that it be developed as a military base. In the Reciprocity Treaty of 1876, the Hawaiian government granted the United States permission to develop the harbor in exchange for allowing the duty-free import of Hawaiian sugar to United States markets. The Hawaiian monarchy was overthrown in 1893, and four years later in 1897, the U.S. was given exclusive use of Pu'uloa. The Navy named it Naval Station, Honolulu in 1899, then Naval Station, Hawai'i by 1901. The name 'Pearl Harbor' came into use after 1908 (Livermore 1944).

Hawai'i in the Progressive Era (1890-1918)

The Hawaiian monarchy was overthrown and the subsequent republican government appealed to the U.S. for annexation, eventually succeeding in August 1898. In the late nineteenth and early twentieth century, the U.S. became embroiled in international politics as other countries began testing their military, political, and economic strengths. The newly-annexed Hawaiian Islands appeared to be a boon to the U.S. as a strategically located site in the Pacific.

Four days after annexation in 1898, the 1st New York Volunteer Infantry Regiment, the 3rd Battalion, and the 2nd U.S. Volunteer Engineers arrived in Hawai'i and set up a temporary camp called Camp McKinley at the foot of Diamond Head (Addleman (Lt) 1946). The following year, regular Army troops encamped at

Camp McKinley, and support elements established offices in nearby Honolulu. By the end of the century, U.S. forces were bolstered by a Depot Quartermaster Office and two batteries of the 6th Artillery Regiment (Addleman (Lt) 1946). According to Linn (1996, 1997) between 1899 and 1902, Army troop numbers in Hawai'i grew from "a handful of engineers" to over 8,000 soldiers. The principal mission of the U.S. Army in Hawai'i was the defense of the naval base at Pearl Harbor, which was established in 1901.

World War I

In Hawai'i, participation in the Great War meant that most of the regular Army departed for Europe by the end of 1917, leaving empty posts in need of caretakers. The Hawaiian National Guard took on the role, entering Federal service at Schofield Barracks and Fort Shafter as the 1st and 2nd Hawaiian Infantry Regiments. The regiments were garrisoned at Schofield Barracks and Fort Shafter from October 1918 to April 1919 (Addleman (Lt) 1946). What is now known as the Kilauea Military Camp (KMC) was established on Hawaii Island in 1916, for training and recreational purposes (Tomonari-Tuggle and Slocumb 2000). The KMC initially consisted of three buildings, constructed by Companies B and E of the Twenty-fifth Infantry Regiment. During their time establishing the camp the Company also constructed the Mauna Loa Trail on Kilauea Volcano (Hoverson 2015).

With the Armistice signed in 1918, the National Guard remained at Schofield Barracks until replaced by the returning regular Army. The Guard spent the post-Armistice period at maintenance and beautification projects, mainly on O'ahu (Addleman (Lt) 1946).

The Inter-War Period

The Inter-War period represented a significant era in the developmental history of Army bases in Hawai'i, namely Schofield Barracks and Wheeler Army Airfield. Both bases saw widespread building campaigns that created the building stock and landscapes that exist to this day.

In the 1920s, the Army experimented with new technologies and re-evaluated old ones, with significant effects on posts in Hawai'i. This decade saw the birth of the Army Air Corps and the increased changes to military lands on the islands.

In the early 1920s, the Army's organizational structure evolved. The National Defense Act of 1920 replaced the Army's geographically based departments with nine corps areas, as well as comparable departments in the overseas possessions of Panama, Hawai'i, and the Philippines. In 1921, a new unit, the Hawaiian Division, was established at Schofield Barracks. At the time, it was the only complete division in the Army (Meeken 1974).

In 1921, the Artillery District of Hawai'i was re-designated Hawaiian Coast Artillery District, and its headquarters was moved from Fort Ruger, Diamond Head Crater on O'ahu, first to the Alexander Young Hotel in Honolulu, and then shortly after to Fort Shafter. Fort Ruger was re-organized as a subordinate command, Coast Defenses of Honolulu (Meeken 1974).

Although budgetary restraints were placed on military services in general during this period, Hawai'i's location made it an exceptional site for Pacific defense and allowed for increased funding. One of the treaties signed after World War I was the Limitations of Armament Treaty of 1921, which prohibited the building of new U.S. military defenses west of Hawai'i. Because of this, Pearl Harbor and the associated Army facilities took on ever-increasing importance in terms of Pacific strategy and national defense (Conn, Engelman, and Fairchild 1964, Alvarez 1982).

In October 1921, the Army took control of Kilauea Military Camp on the north edge of Kilauea Crater and it became the first U.S. Army installation on the island, with the primary purpose of providing rest and recreation facilities for Army personnel. On the Island of Hawai'i, a new Army command, the District of

Hawai'i, was created with authority over the entire island, except for Kīlauea Military Camp, which was considered a separate post command. Headquarters for the new district was in the Hilo Armory.

In the 1930s with the rise of German and Japanese threats, U.S. military strategists viewed Hawai'i as a major defensive site. The development of effective aircraft carriers, with the increased potential for air attacks, prompted the Army to strengthen its anti-aircraft defenses. Both fixed and mobile anti-aircraft stations were set up throughout the islands (Alvarez 1982).

In 1937 with the beginning of the Sino-Japanese War, Hawai'i saw an increase in defense mobilization. By the eve of America's entry into World War II, the military's presence dominated the Islands and served as the largest source of income and employment and by 1940, approximately 48,000 troops were stationed in the Islands (Farber and Bailey 1996, McGregor 2007).

World War II (1941-1945)

On the morning of December 7, 1941, Japanese planes swept over the islands in a surprise attack with most damage occurring at Pearl Harbor, Hickam Field, and Wheeler Field and incidental damage to other installations (Allen 1950).

In the aftermath of the attack, Hawai'i shifted to a state of continuous emergency. For a year and a half, the threat of invasion weighed heavily on everyone's minds, with troops remaining on defensive alert. The Army declared martial law and used this authority to expand military control into all parts of the islands. Beach positions were strengthened with trenches, gun positions, pillboxes, and rolls of barbed wire.

Mobilization

During the war, Hawai'i played a crucial role as the advanced base for the Pacific War and served as a base of operations for military staging, supply, and casualty evacuation, as well as headquarters for numerous Federal agencies and construction firms doing government work in forward areas (Allen 1950, Van Tillburg 2003).

Beginning in 1941, before the surprise attack on Pearl Harbor, the U.S. Military had established an infantry headquarters in the Pu'ukapu area of Waimea, Hawai'i Island. The military presence would expand rapidly after the United States' formal entry into the war, becoming one of the largest complexes of joint military camps and training bases in the Pacific, though they were largely utilized by the Marine Corps. (Bergin 2004, Brundage 1971).

Construction during the initial phase of the war focused on defensive facilities, including a build-up of coastal defenses. This buildup of defensive facilities included the construction of Saddle Road on Hawai'i Island. Another critical component in logistical planning was dealing with the large numbers of civilian workers who came to Hawai'i during the war. Military construction projects required more workers than were locally available and more contractors were introduced to the Islands (Allen 1950).

In 1942, U.S. victory at the battle of Midway increased military activity and troops poured into the islands en route to the western Pacific. Within the first six months of the war, 135,000 troops were stationed in Hawai'i. Jungle training and coordinated Army-Navy amphibious landings were practiced in anticipation of the island-hopping battle strategy of the western Pacific. Hawai'i served as an invaluable training ground for the amphibious and jungle warfare which characterized the Pacific fighting (Allen 1950).

On the Island of Hawai'i, training camps at the north end of the island were connected to Hilo by the Army-built Saddle Road (then known as Kaūmana Road). Older residents of the Waimea area recall a small training camp of tents at Camp Pōhakuloa, and tank maneuvers and artillery practice in the Saddle Region (Langlas, Wolforth, and Head 1999). In 1943 the Parker Ranch leased nearly 123,000 acres of land

were leased to the U.S. War Department for training in the Waimea and Waikoloa areas, most of which would be designated the Waikoloa Maneuver Area. The main cantonment, originally named Camp Waimea, was later named Camp Tarawa after the 5th Marine Division replaced the 2nd Marine Division following the Battle of Tarawa. Camp Tarawa became the largest U.S. Marine training facility in the Pacific Theater (Escott 2008, Clark et al. 2014).

In late 1944 and early 1945, as American forces moved closer to Japan, military headquarters shifted west as well (Allen 1950). In November 1944, the Army's 7th Air Force moved to Saipan, leaving only a wing to defend Hawai'i. Two months later, the Navy's Commander-in-Chief, Pacific Ocean Areas (CINCPAC), moved his headquarters from Pearl Harbor to Guam (Allen 1950).

Wartime development at Hawai'i installations saw construction wherever space was available. Buildings were expanded and remodeled to meet intensified wartime needs and Hawaiian infrastructure became a priority.

The Post-War Years (1946-1989)

After the Japanese surrender on September 2, 1945, the U.S. Army went quickly from full wartime mobilization to demobilization and severe cutbacks in funding. Much of the land that the Army acquired in 1941 was no longer needed, and several posts were considered for closure. In 1948, seacoast artillery was declared obsolete and all guns in the U.S., including those at coastal defenses in Hawai'i, were scrapped. In 1949, funding restrictions placed many Army installations on stand-by status, with Army activities in Hawai'i limited primarily to the major posts on O'ahu (Allen 1950). The Waikoloa Maneuver Area and Camp Tarawa were also slowly released from military control, with the final use permit expiring in 1954 (Escott 2008, Clark et al. 2014). This is in contrast to land acquisitions for National Guard training by Gubernatorial Executive Order and several land leases, which would eventually become PTA (Langlas, Wolforth, and Head 1999).

On July 25, 1950, the U.S. became involved in the Korean War. All military resources in the Hawaiian Islands, including Wheeler Field that had been put in caretaker status, were placed on full alert. As in World War II, Hawaiian posts were used for training replacement troops. In 1951, the Hawaiian Infantry Training Center was established at Schofield Barracks (Belt Collins Hawaii with Mason Architects/International Archaeological Research Institute 2000). In 1953, the conflict ended with the signing of an armistice that restored pre-war conditions on the Korean peninsula.

In 1956, a large parcel on the saddle between Mauna Kea and Mauna Loa on the Island of Hawai'i was acquired through Gubernatorial Executive Order and leases. Bradshaw Army Airfield (BAAF) was built at the same time (Langlas et al. 1997). As a result of the Hawai'i Admissions Act of 1959 (Public Law 86-3-Mar. 18, 1959), federal agencies were required to identify all lands that were needed. As a result of these efforts, 84,000 acres of the PTA were retained by Presidential Executive Order 11167, 65 year leases were signed with the State for 22,971 acres, and the Cantonment, BAAF, and a portion of the land south of the Old Saddle Road were retained by the Army under the existing Gubernatorial Executive Order.

In the mid-1960s, the U.S. became embroiled in a regional conflict in Southeast Asia. American participation in the Vietnam War continued until 1975, with a peak in 1969 when over 543,000 troops were stationed in Southeast Asia. War-related preparations on the Island of Hawai'i took place near KMC (Tomonari-Tuggle and Slocumb 2000). In June 1964, the U.S. Army was granted a permit from the State Department of Land and Natural Resources to conduct meteorological and tracer tests in the 'Ōla'a Forest Reserve near KMC. In January 1966, another 1,144 acres in the upland region was leased for additional experiments, including a "Jungle and Environmental Test Site" which was said to be used to test clothing, equipment, and munitions for possible use in Vietnam.

Army Reorganization

The Army reorganized several times following World War II. In 1947, the Department of Defense was created as a unifying umbrella organization for the armed forces. At the same time, the U.S. Air Force was established and was seen as the primary service that would be capable of delivering nuclear weapons; the Army was assigned responsibilities for “conducting land warfare, providing troops for occupation duty, and providing for air defense units” (U.S. Army Environmental Center 1998).

In 1952, the Armed Forces Reserve Act placed the Army Reserve as a distinct entity within the Army structure. In 1955, the Army activated the Continental Army Command (CONARC). Commands were divided among subordinate numbered armies that were organized geographically. Most of the CONARC installations focused on manning or training Army forces for ready deployment anywhere in the world.

In 1962, the Army underwent a significant reorganization. The technical services were abolished and their functions assigned to new agencies (U.S. Army Environmental Center 1998). The most important of these agencies was the Army Materiel Command, which reorganized the logistical functions of the technical services along functional lines. Other commands included the Army Air Defense Command, Strategic Communications Command, and Military Traffic and Terminal Service.

In 1973, the Army carried out further reorganization. CONARC and the Combat Developments Command was replaced by Forces Command (FORSCOM) and Training and Doctrine Command (TRADOC), both commanded by four-star generals (U.S. Army Environmental Center 1998). The Army placed a renewed emphasis on training in creating TRADOC, which assumed responsibility for all Army branch schools, as well as all training organizations. FORSCOM was responsible for fighting units and the supporting structure that functioned within a theater of operations; and U.S. Army Pacific (USARPAC) was formed as a comparable command with authority in Alaska, Hawai‘i, and the Pacific islands.

3. CULTURAL RESOURCES OVERVIEW

3.1. Categories of Cultural Resources at USAG-Pōhakuloa

This section details the categories of cultural resources as defined in legal authorities, and the responsibilities set out in those authorities. AR 200-1 acknowledges multiple sources of legal responsibilities that define cultural resources, including the following:

- **Historic properties** as established by NHPA
- **Archeological resources** as defined by ARPA
- **Sacred sites** as defined in EO 13007 to which access is afforded under AIRFA
- **Archaeological Collections and associated records** as defined in 36 CFR §79
- **Cultural Items** as defined in NAGPRA

The laws place different (though often similar) responsibilities upon federal agencies with respect to each type of cultural resource. USAG-Pōhakuloa is responsible for carrying out the requirements of all of these laws on Hawai'i Island for the Army, and the Garrison Commander is the federal agency official as defined in each law per AR 200-1. A single property may simultaneously qualify as a cultural resource under multiple authorities. As an example, an archaeological site may be simultaneously a historic property under NHPA, an archaeological resource under ARPA, a sacred site under AIRFA, and contain cultural items as defined by NAGPRA.

Historic property, as defined by NHPA (54 U.S.C. § 300101 et seq), is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP), as maintained by the Secretary of the Interior. This term also includes artifacts, records, and remains that are related to, and located within, such properties. The term includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian Organization that also satisfies National Register criteria (Department of the Army 2007).³

As per 36 CFR §60.3 buildings, districts, objects, sites, and structures are defined as follows:

- **Building.** A building is created principally to shelter any form of human activity, such as a house, barn, church, hotel, or similar construction. Building may also be used to refer to a historically related complex such as a courthouse and jail, or a house and barn.
- **District.** A district is a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.
- **Object.** An object is a material thing of functional, aesthetic, cultural, historical or scientific value that may be, by nature or design, movable yet related to a specific setting or environment.
- **Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself maintains historical or archeological value regardless of the value of any existing structure.
- **Structure.** The term structure is used to distinguish from buildings those constructions made usually for purposes other than human shelter, such as a bridge, tunnel, earthworks, railroad grade, or similar construction. A structure may also be an engineering project large in scale.

³ The reader should be aware that the definition of “historic property” in the law of the State of Hawai'i is similar but a bit different from the definition in NHPA. In some situations the difference can lead to unintended confusion.

Archaeological resource, as defined by Section 3(1) of ARPA (16 U.S.C. 470bb[1]), includes “Any material remains of human life or activities that are at least 100 years old and that are of archaeological interest.” Archaeological resources as defined by ARPA may also be cultural resources with independent protections from other laws such as the NHPA or NAGPRA. An archaeological site may well qualify as a cultural resource because it contains archaeological resources of interest, but still not qualify for the NRHP as an historic property. In such cases, the site may be protected from unauthorized removal of artifacts, but not be afforded consideration when in the path of proposed construction.

Sacred site is defined in EO 13007 as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site." This Executive Order envisions discrete locations on federal lands identified by authoritative representatives as sacred by virtue of established religious significance or ceremonial use, rather than addressing a generalized sense of sacredness throughout the landscape. Also, AIRFA (42 USC §1996) protects access to, and use of, these sites by those practicing a traditional religion, to the extent practicable, and not clearly inconsistent with the military mission.

Archaeological collections and associated records, as defined under 36 CFR §79: Curation of Federally Owned and Administered Archaeological Collections, include collections of material remains, such as artifacts, objects, specimens, and other physical evidence, that are excavated or removed during a survey, excavation, or other study of a prehistoric or historic resource. The regulations at 36 CFR §79 specify in detail the levels of care an agency must continue to provide for these permanent collections. ARPA clearly designates archaeological collections and the associated records as subject to continuing stewardship responsibilities by federal agencies. The regulations incorporate responsibilities for long term care of archaeological collections derived from other statutes as well.

Cultural Items. According to Section 2(3) of NAGPRA (25 U.S.C. 3001[3]), cultural items include human remains, associated and unassociated funerary remains, sacred objects, and objects of cultural patrimony. These types of cultural items can, and often are, found within archaeological sites. NAGPRA outlines a specific process to determine ownership of NAGPRA cultural items that are presently in the possession of, or under the control of, museums and Federal agencies, but ultimately NAGPRA cultural items belong to the closest culturally affiliated lineal descendant(s).

National Historic Landmark (NHL), as defined by 36 CFR §65.3(h), is a district, site, building, structure, or object possessing national significance in American history, archeology, architecture, engineering, or culture. The Secretary of the Interior designates an NHL under authority from the Historic Sites Act of 1935. When the Secretary of the Interior designates an NHL, it is automatically also considered to be a historic property for purposes of the NHPA and listed on the National Register of Historic Places as of the date of its NHL designation.

Historic Status Codes

In accordance with EO 13287, the Department of the Army maintains data and information systems on federal real property that includes cultural resource data fields for historic real property assets. The DoD has adopted the following Historic Status Codes which are attributes of the official Department of the Army Real Property database of record. Each assigned code should be substantiated by documents

coordinated with State Historic Preservation Office or the National Park Service with respect to the current status of each facility with respect to the NRHP and criteria of eligibility.

NHLI	Individual National Historic Landmark	A facility that is individually listed on the NRHP and has further been declared to be a NHL by the Secretary of the Interior due to its prominent importance in our Nation’s history.
NRLI	Individual National Register Listed	A facility that has been individually determined to meet the NRHP criteria of eligibility, and has been formally listed in the NRHP by the Keeper of the National Register.
NREI	Individual National Register Eligible	A facility that is individually determined to meet the NRHP criteria of eligibility, but had not gone through the formal nomination process.
NCE	Non-Contributing Element of a NHL or NRHP District	Facilities within the designated boundaries of a NHL District or NRHP-listed or NRHP-eligible district that have been evaluated and determined not to contribute to the historic or architectural significance of the district.
DNE	Determined Not Eligible for Listing	A facility that has been evaluated using the NRHP criteria and is determined not to meet any of the requirements for eligibility.
DNR	Designation Rescinded	A facility formerly classified as NHLI/NHLC/NREI/NREC which has been determined by the Keeper to lack integrity to remain a historic property. The formal removal process of NREI/NREC properties involves the review, approval, and signature of the FPO and the SHPO.
NHLC	Contributing Element of a NHL District	An individual facility that is identified as a contributing element of a district listed on the NRHP and also designated a NHL district by the Secretary of the Interior.
NRLC	Contributing Element of a NRHP Listed Historic District	An individual facility that is identified as a contributing element of a larger historic district formally listed on the NRHP.
NREC	Contributing Element of a NRHP Eligible Historic District	An individual facility that is identified as a contributing element of a larger district determined eligible for listing on the NRHP.
ELPA	Eligible for the purposes of a Program Alternative	An individual facility that is treated as eligible for listing in the NRHP by consensus of the Federal Preservation Officer, State Historic Preservation Officer and Advisory Council on Historic Preservation during the development of a program alternative as defined in 36 CFR 800.14. Examples include Capeheart-Wherry Housing, Cold War era Unaccompanied Personnel Housing, and World War II and Cold War era Ammo Storage Facilities.
NEV	Not Yet Evaluated	A facility that has not yet been evaluated for historic status.

3.2. General Overview of Cultural Resources Inventory at USAG-Pōhakuloa

USAG-Pōhakuloa has direct responsibility primarily for archaeological sites within the Army jurisdiction on Hawai'i Island, but manages other resource types as required. USAG-HI provides support for management of historic buildings and districts within Army jurisdiction on the Island of Hawai'i.

All of the types of historic properties discussed in Section 3.1 are found on Army installations on Hawai'i Island (see Appendix D for USAG-Pōhakuloa Inventory). Historic properties at USAG-Pōhakuloa include sites, buildings and structures. Archaeological sites, both those that are historic properties and archaeological resources as defined in ARPA, include habitation sites, resource procurement sites, trails, animal control features, and shrines. The sites date to the pre-contact Hawaiian period as well as the post-Contact period during which Hawaiian culture was changing with the influence of Western culture and other contacts. There are also archaeological sites and structures related to 19th and early 20th century activities including ranching and land survey within PTA.

Archaeological Sites. The inventory of archaeological sites on Hawai'i Island Army installations includes 1,198 archaeological sites with descriptive documentation on file, all located at PTA. Of these, 39 are listed on the NRHP or have been formally determined eligible with concurring opinion from SHPD and 11 sites are considered eligible. Another 326 have been determined NOT eligible for the NRHP, with over 822 still in need of a formal evaluation. It is Army policy (AR 200-1: 6-4(9)) to treat known but unevaluated properties "as if" eligible until a formal evaluation is made.

No archaeological sites with Traditional Hawaiian associations have been identified within the PTA Cantonment area, at KMC, or at Kawaihae Military Reservation. All of the sites with Traditional Hawaiian associations are found in the training areas within PTA. SHPD has concurred in consultation that it is unlikely that subsurface archaeological deposits will be found within the PTA Cantonment and BAAF areas. This determination was made on the basis of documentation of subsurface excavations throughout the area. Subsurface monitoring of excavations at KMC has also failed to produce any stratified archaeological deposits. Kawaihae Military Reservation is built on fill, and although it is located in close proximity to significant cultural resources none are within the boundaries of the installation.

The area used for military training at PTA is divided into 23 training areas of varying sizes, a high hazard Impact Area, and the KMA. Most of the area is made up of relatively recent Mauna Loa lava flows with very little soil development and few sedimentary deposits. The northern portion of PTA, generally north of the Impact Area and Training Areas 21 and 22 including the KMA and the Cantonment area, consists of Mauna Kea ash deposits and soils that developed on them. In the rough Mauna Loa volcanics, modification of the landscape is minimal due to the difficulty of developing the lava. Recent developments have utilized modern construction equipment that has a greater impact on the lava. Due to the nature of the landscape, archaeological sites may be found within many of the developed areas throughout the training areas. Since the implementation of NHPA, there has been an effort to avoid archaeological sites during range construction, either shifting the range to avoid rich archaeological sites or building the range around the sites. The areas with Mauna Kea deposits are much more malleable, and show the effects of years of ranching and subsequent military activities. KMA was part of a ranch for more than 100 years before it was purchased by the Army, and ranch management included the use of bulldozers and chain dragging to install infrastructure and manage the landscape, in addition to more than 100 years of cattle grazing. This has resulted in very few traditional Hawaiian archaeological sites in the KMA.

Sacred Sites. No sacred sites, as defined by AIRFA and EO 13007, have been designated at any of the installations on Hawai'i Island as of November 2016.

Historic Buildings, Structures, and Objects. USAG-HI provides the expertise of qualified architectural historians toward the management of 400 buildings at PTA, and the nearly 100 buildings and structures contributing to the character of the KMC on Hawai'i Island. ⁴ The identified historic buildings at KMC span construction dates from 1916 through 1953, and at PTA 1955 through 1964. Approximately two-thirds of these buildings at PTA were determined eligible for the purposes of the Cold War Era Unaccompanied Personnel Housing (UPH) Program Comment (see ICRMP Section 6.4).

Historic Districts. USAG-HI supports management of buildings at the historic district of Kilauea Military Camp on Hawai'i island. KMC is located within Hawai'i Volcanoes National Park, and SHPD concurred with the eligibility of the district on 8 October 1996.

Curation Facility. USAG-Pōhakuloa operates a curation facility, located within PTA, through a cooperative agreement with the Research Corporation, University of Hawai'i. The care and conservation of artifacts and historical documents in accordance with *36 CFR Part 79: Curation of Federally Owned and Administered Archaeological Collections* is the responsibility of the Garrison Commander, assisted by the PCSU-PTA Cultural Resources Curation Specialist assigned to the curation facility at PTA with oversight provided by the USAG-Pōhakuloa CRM. The collection includes both the physical items recovered through archaeological investigations on lands within Army jurisdiction and the associated records and information related to them. The information management is extremely important for preserving the value of the collection for future research and for interpretation or educational uses (See Appendix B for *Cultural Resources Material Remains and Associated Records Curation Standards*). USAG-HI has completed NAGPRA inventories and repatriation of cultural items that were found in the USAG-Pōhakuloa collections.

Cultural Items.

Burial Features in archaeological sites

Some of the archaeological sites have confirmed burial features of Native Hawaiian origin, *iwi kupuna*, within them. These known burial features are cultural items as defined by NAGPRA. Any planned disturbance of these features would require prior compliance with the provisions of NAGPRA, and any inadvertent disturbance would require compliance with the NAGPRA provisions for inadvertent discovery. The precise location of known burial features is considered sensitive information not generally shared publicly.

Re-burial features in situ or near situ

Some past undertakings have discovered or disturbed burial features, *iwi kupuna*, with consultations for treatment resulting in re-interments at or near the original places of discovery. The precise locations of these re-burials are considered sensitive information not generally shared publicly.

Re-burial crypt

Some *iwi kupuna* have been reinterred after consultations in a crypt in a natural lava tumulus at PTA, in accordance with commitments made during consultations. The precise location of the crypt is not generally shared publicly.

⁴ Note: NPS claims 103 contributing resources, 42 non-contributing, and 2 “undetermined” within the KMC district. These numbers do not match Army real property records that show 79 contributing or eligible, 42 non-contributing, and 2 yet to be evaluated.

Informational challenges

The cultural resources inventory at USAG-Pōhakuloa, while generally well ordered, has some aspects that need attention and improvement during the course of the next planning cycle. Analysis of available inventory information during the development of this document revealed some circumstances with respect to inventory that impede good cultural resources management and which can be improved during the ICRMP implementation cycle.

1. A large percentage of possible historic properties, primarily archaeological sites, are unevaluated. Since the Army regulations require treating unevaluated properties as if eligible, the unevaluated status of these properties may be resulting in diversion of staff time and Garrison fiscal resources to accommodate these properties during the planning and implementation of undertakings.
2. For the archaeological site inventory, there is a need to re-validate the reported site locations, adequacy of current site descriptions, and attributed site types, especially for sites documented in older archaeological survey reports.
3. For all classes of cultural resources, the DPW GIS under development within the Planning Division offers the best long-term prospect for sharing cultural resources inventory information quickly and reliably with planners and project proponents. The re-organization of existing inventory information and validation of information consistent with GIS Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) is a priority need for the program, and is in progress. A well-developed GIS application should be a primary method for integrating cultural resources inventory information with other Garrison plans. It will also support production of more informative maps for communications with consulting parties.

Appendix D has a list of known archaeological sites, a list of buildings and structures with any of the positive historic status codes, and a list of buildings and structures that are 50 years of age or older, but still not evaluated. These lists are the best available as of December 2016. The inventory information frequently changes as new areas are surveyed, sites or buildings are evaluated, or as corrections are made with new information in hand. Proponents planning new undertakings are strongly advised to confer with the Cultural Resources Section for current information rather than rely solely on the lists in the Appendix.

3.3. Cultural Resources Inventory

Archaeological Resources

Past Research

Archaeological surveys at PTA began in 1977 with a reconnaissance survey by the Bishop Museum to identify archaeological sites on Army controlled lands in Hawai'i (Rosendahl 1977). Ten archaeological sites were identified at PTA, primarily through informant testimony. No sites were identified at KMC or Kawaihae Military Reservation. Surveys at PTA in the 1980s began to identify substantially more sites, and recognition of the types of sites present in the area has increased since that time.

Archaeological surveys in the 1980s identified lava tube habitation sites in two areas on the western side of PTA (Haun 1986, Athens and Kaschko 1989). One of these sites was listed on the NRHP, and 13 others were determined eligible for the NRHP. Surveys also identified trails, cairns, terraces, platforms, mounds and a volcanic glass source area. Archaeological surveys in the 1990s and early 2000s along Red Leg Trail on the eastern side of PTA identified similar sites, with the addition of *pāhoehoe* pits and more extensive volcanic glass source areas (Reinman and Pantaleo 1998b, Williams 2002, Williams, Reinman, and Nees 2002). Surveys during this time were also conducted in training areas on State leased land on the north side of the Impact Area, and additional survey on the western side of PTA (Reinman and Pantaleo 1998a, Reinman and Schilz 1999). These surveys identified additional lava tube habitation sites. Archaeological surveys for the proposed routes of Saddle Road improvements, which passes through lands controlled by USAG-Pōhakuloa, identified pre-contact complex sites incorporating surface features with lava tube shelters, lava tube habitation sites, as well as historic-era ranching walls and fence lines (Welch 1993, Langlas, Wolforth, and Head 1999). These surveys also identified recent military sites built from local rock.

The stationing of a Stryker Brigade in Hawai'i in the early 2000s prompted additional archaeological surveys of Army controlled areas that had been used for training since the mid-20th century as well as privately owned land that had been used for military training during World War II and/or periodically in subsequent years (Roberts, Robins, and Buffum 2004). Surveys across the State leased lands and along Red Leg Trail relocated previously identified sites and identified surface features, increasing the number of sites identified but not generally the type. Many of these surface features such as wall alignments and cairns with sticks were identified as recent military sites built by units training at PTA. The purchase of the Ke'āmuku parcel in 2006 for maneuver training added a significant number of sites and increased diversity of ranching features to the inventory, both archaeological sites and structures.

Most archaeological surveys at PTA are conducted in response to a NHPA Section 106 undertaking, but some Section 110 surveys have also been conducted. PTA is not high altitude, but the elevation requires acclimatization for field workers. Most areas are remote, requiring substantial travel time to reach them once the crew is at PTA. The *'a'ā* and *pāhoehoe* lava flows are not easy to walk across, and are wearing on the crew members. These factors contribute to the expense and time required to conduct archaeological surveys at PTA. 61,892 acres outside of the high hazard impact area remain to be surveyed at PTA, primarily in remote areas that are not used for training. Survey is conducted in portions of the Impact Area as areas are reclaimed for ranges and other training infrastructure.

Pōhakuloa Training Area (PTA)

As of 30 September 2016, PTA contains 1,198 known archaeological sites. Thirty-nine sites have been determined eligible for the NRHP. Of the eligible sites, 5 are related to 19th and 20th century contexts, 32 are Traditional Hawaiian sites, 1 is protohistoric, and the period of significance for the one remaining site is not yet identified. Known archaeological sites at PTA represent a diverse range of Native Hawaiian site

types, including caves, enclosures, lithic scatters, C-shaped shelters, shrines, platforms, and trails. One site is listed on the NRHP (Bobcat Trail Habitation Cave, site 50-10-30-5004), which spans the Traditional Hawaiian and 19th Century periods at a minimum. The Bobcat Trail Habitation Cave is listed on the NRHP under Criterion D for its research potential associated with Hawaiian culture and lifeways (Rosendahl 1983). Of the known sites, 326 have been determined not eligible, and 822 are unevaluated. Of the unevaluated sites, 89 are 19th or 20th century sites, 364 are Traditional Hawaiian sites, two span the Traditional Hawaiian and historic-era contexts, two are recent, and a period of significance has not been identified for 365. No archaeological sites have been identified in the PTA Cantonment or Bradshaw Army Airfield (BAAF). Portions of both areas have been surveyed, and subsurface monitoring in both areas has failed to identify any stratified archaeological deposits.

To date approximately 20% of the PTA High Hazard Impact Area has been surveyed, and approximately 50% of the area outside the Impact Area has been surveyed for cultural resources.

Kawaihae Military Reservation

Kawaihae Military Reservation consists of landfill area, therefore archaeological sites are not anticipated. In 2001, these findings were confirmed by archaeologists, Cox and Zulick, who visited the installation and found that no archaeological remains were located within the Army-controlled portion of Kawaihae Harbor (Rosendahl 1977, Cox and Zulick 2001).

Kīlauea Military Camp (KMC)

No subsurface cultural deposits have been located at KMC. Clearance surveys for the Hawai'i Volcanoes National Park identified five isolated historic period remains (including a stone walkway, an earth mound, a stone path, an L-shaped stone foundation, and a disturbed cement foundation), all were determined ineligible for nomination to the NRHP (Tomonari-Tuggle and Slocumb 2000).

Historic Buildings, Sites, Structures, and Districts

Pōhakuloa Training Area (PTA)

Although the area was used by the U.S. Marines during WWII, PTA was not established until the mid-1950s. The Marines lived in tents with no established buildings. Following the War, the Hawai'i (Territorial) National Guard trained in the area until PTA was established by the Army.

To date, no historic buildings at PTA are determined eligible for the NRHP. Most of the buildings on PTA are Quonset huts dating from 1955-1958. In 2006, the ACHP published a Program Comment for the Department of Defense regarding Cold War Era Unaccompanied Personnel Housing (UPH), and the Army in turn published a historic context on *Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989)* as mitigation for any adverse effects to properties identified under the ACHP Program Comment. Seventy-eight of the buildings at PTA are considered Cold War era UPH in accordance with ACHP Program Comment and thus are not subject to further NHPA consultation or mitigation, and a consultation is underway with SHPD for the remaining buildings.

A transportation related property on Hawai'i is the Saddle Road, realigned and renamed the Daniel K. Inouye Highway. Originally built by the Army during World War II along an alignment that crossed the center of Hawai'i Island through PTA, the road was later realigned to travel along the margins of the installation.

Bradshaw Army Airfield (BAAF) also contains Quonset huts dating from 1958-1965 (T-302, T-303, T-351). T-303 is considered eligible for the purposes of the ACHP Program Comment regarding Cold War era UPH.

Kawaihae Military Reservation

Most of the current structures on Kawaihae Military Reservation were built from 1959-1985 and consist of wharves, sea walls, offshore moors, and a dock/ramp (Cox and Zulick 2001). Six buildings and structures require evaluation to determine NRHP eligibility.

Kīlauea Military Camp (KMC)

KMC is a Historic District determined eligible for listing on the NRHP for its association with the development of a recreation camp for U.S. military personnel on the Island of Hawai'i. According to National Park Service records, the Hawai'i SHPD concurred with the National Park Service determination that Kīlauea Military Camp is eligible for listing on the NRHP in 1996 (National Park Service 2006). The camp is also considered locally significant for its Plantation-style architecture using local materials and adaptation of National Park Service rustic and naturalistic design. According to a 2017 letter from the Superintendent at Hawai'i Volcanoes National Park, there are 103 contributing elements and 42 non-contributing elements within the eligible Historic District, with two remaining buildings and structures yet to be evaluated (Orlando 2017).⁵

Cultural Items

An Archaeological Collection Summary for Pōhakuloa Training Area: Information Provided for Compliance with the Native American Graves Protection and Repatriation Act Section 6 Summary was completed in 1996 (U.S. Army Corps of Engineers 1996). USAG-Pōhakuloa identified and repatriated those human remains and cultural items within the Garrison's collections described in the 1996 summary. In some cases human remains, or *iwi kupuna*, were re-interred as an appropriate disposition in compliance with NAGPRA. These places are of high cultural and traditional religious value and therefore locational information is restricted in accordance with the commitments made during consultation for those actions.

⁵ Note: NPS claims 103 contributing resources, 42 non-contributing, and 2 "undetermined" within the KMC district. These numbers do not match Army real property records that show 79 contributing or eligible, 42 non-contributing, and 2 yet to be evaluated.

3.4. Mission Activities and Military Impacts to Cultural Resources

Impacts to Historic Buildings, Structures, and Districts

Undertakings that pose potential threats to historic architectural resources generally involve alterations to the property or the surrounding area. These include:

- Digging;
- Demolition;
- Pests and Rodents;
- Vegetation Encroachment;
- Historic Property Modifications and Maintenance can damage the property when renovations, additions, and repairs are not consistent with the historic character; and
- Deterioration can cause irreparable damage to historic materials. Buildings may also deteriorate without periodic major repairs or renovation programs for upgrading utilities and/or structural systems to current standards.

External threats and activities that can impact historic properties are:

- Natural Disasters and Accidents;
- Land Transfers, Leases, and Easements of land to federal or non-federal agencies, or the granting of land use permits, leases, licenses, or right-of-way easements are a threat to historic resources unless legal documents contain covenants providing protection;
- Loss of Historic Documents pertaining to historic properties can occur through deterioration or be lost unless inventoried and stored to prevent deterioration or permanent loss;
- Short Range Planning is heavily influenced by the Army's funding programs and priorities and can lead to project proposals that adversely affect historic properties; and
- Downsizing/Inventory Reductions can create pressure to demolish historic properties.

Impacts to Archaeological Resources

Potentially adverse impacts to archaeological resources are most common on training lands. These threats include:

- Maneuver damage from wheeled and tracked vehicles;
- Vandalism and looting (either by military personnel or the public);
- Explosive ordnance;
- Target insertion;
- Excavation and earth-moving activity;
- Wildland fire operations; and
- Natural erosion processes that may be exacerbated by the above.

External threats and activities that can impact historic properties are:

- Natural Disasters and Accidents; and
- Land Transfers, Leases, and Easements of land to federal or non-federal agencies, or the granting of land use permits, leases, licenses, or right-of-way easements are a threat to historic resources unless legal documents contain covenants providing protection.

Common forms of excavation within training areas are mission-related and are implemented for purposes of tactical concealment and survivability. These include large volume excavations carried out by Combat Engineers with heavy earth moving equipment to partially or entirely conceal artillery (gun emplacements), personnel carriers and support vehicles, or for defensive purposes. Deep excavations

usually accompany the construction of bunkers, shelters, and protective walls (Department of the Army 1985). Individual fighting emplacements (e.g., fox holes) are less common and less invasive. Because of the large volume of displaced earth from tactical digging operations, they can have a severe impact to the surface and subsurface archaeological record.

Another training-related threat is the unauthorized movement and use of stones to create "hasty fortifications" for tactical defensive positions. The removal or reconfiguration of stones from archaeological features destroys their integrity and may make them unrecognizable.

Apart from military training activities, there are a host of other potential threats to archaeological resources in these training areas. These include the following ground-disturbing and/or vegetation-clearing activities:

- Facilities development (site grading and improvements);
- Underground utilities construction;
- Hazardous waste remediation;
- Insertion of utility poles or fence posts;
- Vegetation grubbing;
- Landscaping;
- Unauthorized excavation of archaeological sites (looting);
- Soil investigations;
- Operation of (off-road) vehicles in unpaved areas;
- Soil contamination;
- Recreational activities, including public hunting and ATV use;
- Unexploded Ordnance Detonation; and
- Pedestrian human or animal activity (Anderson 1998).

Impacts to Sacred Sites

Adverse impacts to Sacred Sites corresponds with the above discussion on archaeological sites and inadvertent damage from military training to vandalism and looting, should any Sacred Sites be identified at the installations on Hawai'i Island.

Impacts to Curated Archaeological Collections and associated records

Curated artifact collections are typically not directly impacted by the military mission; however, they can be negatively impacted when the requirements of 36 CFR §79, Curation of Federally Owned and Administered Archaeological Collections are not followed. They may also be impacted by decisions regarding changing use of space in facilities that house the materials, as well as natural disasters and accidents.

Impacts to Cultural Items

NAGPRA cultural items may be negatively impacted when archaeological sites and/or burials are inadvertently damaged due to military training, vandalism, looting, natural disasters, or accidents. Violation of the provisions of AIRFA, ARPA, or NAGPRA may also result in adverse impacts to cultural items.

4. GOALS AND OBJECTIVES

The purpose behind these goals and objectives is the integration of legal requirements for Cultural Resources Management into the everyday operations of USAG-Pōhakuloa’s military mission and support activities. This ICRMP incorporates guidelines and procedures for cultural resources management into a single document to more efficiently fulfill management responsibilities.

4.1. Goals

- Efficiently meet USAG-Pōhakuloa’s obligations for compliance with NHPA, NEPA, NAGPRA, ARPA and other legal requirements in an efficient and effective manner consistent with DoD standards while minimizing effects on the military mission
- Ensure that current and planned installation programs, plans, and projects are integrated with cultural resources management initiatives
- Enforce Federal laws that prohibit vandalism of cultural resources on Federal properties through law enforcement, monitoring, and public awareness
- Identify and evaluate cultural resources for eligibility for inclusion in the National Register of Historic Places and maintain an up-to-date inventory of historic properties
- Avoid or minimize adverse effects to historic properties that meet eligibility criteria for inclusion in the National Register of Historic Places
- Preserve significant historic properties whenever possible and mitigate in accordance with the outcome of consultation in the long-term public interest when adverse effects cannot be avoided
- Ensure that appropriate consultation procedures are followed at the earliest planning stage of any undertaking that may affect historic properties
- Maintain a cultural resources program staff that meets the *Secretary of the Interior’s Professional Qualification Standards* (36 CFR §61)
- Maintain confidentiality regarding the nature and location of archaeological sites unless the Federal agency official determines that disclosure would further the purpose of ARPA and not create a risk of harm
- Maintain curation of archaeological collections and records, and orderly control of the technical libraries and associated records needed to support the CRM program

4.2. Planning Objectives

Improve coordination in compliance review of undertakings with emphasis on timely and effective coordination between proponents and the Cultural Resources Manager. Encourage use of DPW-wide GIS for more effective and reliable exchange of planning information among programs. In order to better support planning and operations within the training areas, these GIS layers should identify whether a particular survey area was searched adequately to meet the “reasonable and good faith” standard for identifying historic properties and other cultural resources should there be an undertaking planned within that area, or whether supplemental identification efforts would still be needed for major undertakings.

The locations, extent, and the important attributes of each known archaeological site also needs to be systematically compiled in GIS and maintained to provide “best available” current data for all planners within USAG-Pōhakuloa. Note that some archaeological site location data are restricted from general public dissemination. Access to this data is For Official Use Only (FOUO) and is restricted to approved Garrison personnel.

A systematic update of sensitive cultural resources area GIS maps is also necessary for prioritizing future cultural resources survey efforts and for alerting planners of potential cultural resources issues in

preliminary planning efforts. The current maps combine information from several sources, including known site locations with buffers and unsurveyed areas judged to have high probability of site occurrence.

Recent emphases in real property accounting standards within DoD have resulted in an increased emphasis on documenting SHPD concurrence regarding a particular property's eligibility for listing in the NRHP. Eligibility establishes particular standards of care and responsibility for USAG-HI, the applicability of which needs to be reflected in the real property inventory records. An agency determination without written concurrence from the SHPO is not sufficient for the accounting standard, especially for buildings, structures, and objects managed by USAG-HI. Requests for SHPD concurrence as to the eligibility of properties and sites will be a significant part of the correspondence and interaction between the Garrison and the SHPD, whether or not the subject properties are at risk of being affected by a particular project or undertaking.

It is important that Real Property information and GIS be integrated with cultural resources inventory data regarding historic buildings, structures, objects, and districts. The Garrison needs to develop adequate tracking of real property with respect to the historic status code of each real property asset. The Real Property system is designed only to record the status of "historic properties" as defined in the NHPA, but a more effective way of managing property data records for cultural resources that do not meet the definition of "historic properties" is needed.

Maintenance Plan(s) for historic buildings, structures, objects and districts outline a proactive approach to the management of historic properties. This proactive approach assists in the reduction of operating costs for historic buildings, structures, objects, and districts and ensures that all applicable regulatory laws and regulations are adhered to. The Garrison should develop Maintenance Plans for historic properties, detailing the methods for, and monitoring of, maintenance, repair, and rehabilitation of historic buildings, structures, objects, and districts.

Over the course of this plan, USAG-Pōhakuloa will improve its stewardship of important cultural resources by:

- Conducting archaeological inventory survey in areas not adequately surveyed as needed to support training and other projects and missions.
- Pro-actively consulting with Native Hawaiian Organizations and other interested parties in accord with Department of Defense and Department of the Army guidance.
- Making up-to-date cultural resources information easily accessible to planners, project proponents, and others through use of GIS and databases.
- With support from USAG-HI, evaluate previously unevaluated buildings that are 45 years old or older.
- Continuing to implement formal agreements through consultations that satisfy the regulatory requirements and streamline their implementation.
- Maintaining a comprehensive inventory and associated records for archaeological sites, historic buildings, structures, objects, and districts.
- Conducting regular education regarding cultural resources and procedures related to them for:
 - Military personnel newly assigned to USAG-Pōhakuloa
 - Planners, project proponents, and others whose programs and actions have high potential for affecting cultural resources.
 - Members of the public who are intended to benefit from historic properties and other cultural resources.
- Cultural resources protection measures are an important component of the cultural resources management program. There shall be no collection of archaeological items or artifacts except as necessary in the course of official job duties or within the terms of a valid ARPA permit. All

personnel newly assigned to USAG-Pōhakuloa shall be informed of the prohibitions against collecting archaeological items, and of the Garrison policy of enforcing these prohibitions. USAG-Pōhakuloa shall not make public information regarding the specific location of archaeological sites when such disclosure could endanger the continued integrity of the sites.

4.3. 5-Year Project Planning

Over the next five years, USAG-Pōhakuloa expects to have undertakings that could potentially affect historic properties. These potential undertakings include routine maintenance and operations, construction projects, natural resources management activities, and recurring training exercises. Proponents for such undertakings include USARHAW TSS, USAG-HI DPW, USAF-P DPW, U.S. Marine Corps, other tenant organizations, and training area users.

Listed below are several such projects that may be started within the next few years that USAG-Pōhakuloa is currently tracking as potentially affecting historic properties.

- Keamuku Range Roads improvements
- Access Control Points
- Aviation Gunnery Range
- Qualification Training Range
- Road Paving projects

The following is a summary of FY17 undertakings (as defined, NHPA 54 U.S.C. §300320) that may require cultural resources consultation:

USAG-Pōhakuloa FY17 Adjusted 1-N List

2017 Proposed Priority	Project Number	Project Description	Installation / Location	Category
5	57417	Ammunition Storage Facility	Pohakuloa Training Area	Installation Ammo Storage
2	58273	Keamuku Range Roads - Garrison MSR - Troop Construction	Pohakuloa Training Area	Range road
4	62078	Access Control Point & MP Station	Pohakuloa Training Area	MP Station
1	66024	Aviation Gunnery Range	Pohakuloa Training Area	Aerial Gunnery
1	76472	TUAV Facilities (PTA)	Pohakuloa Training Area	TUAV HANGAR
5	78355	Qualification Training Range	Pohakuloa Training Area	QTR
	90904	(ADD) TT Barracks Requirement (2) PNs (one area = 5 bldgs)	Pohakuloa Training Area	
	90905	(ADD) TT Barracks Requirement (2) PNs (one area = 6 bldgs)	Pohakuloa Training Area	
	NEW	(ADD) Red Leg Road Paving	Pohakuloa Training Area	
	NEW	(ADD) Lava Road Paving	Pohakuloa Training Area	
	NEW	(ADD) MPRC Road Paving	Pohakuloa Training Area	

5. STANDARD OPERATING PROCEDURES

5.1. SOP 1: Compliance Procedures for NHPA Section 106

Introduction

The National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR §800, outline a systematic process for review and consideration of historic properties when planning and executing undertakings. If National Environmental Policy Act (NEPA) procedures are required, then compliance for both may occur simultaneously.

Preservation of historic properties is encouraged, but not a mandated outcome, of the Section 106 process. Instead, the Section 106 process provides for consideration of alternatives and allows the public and other stakeholders an opportunity to comment on federal undertakings that have the potential to affect historic properties. It is important that the Section 106 process be initiated early in the project planning process in order to allow sufficient consideration of a reasonable range of options.

Implementing Authorities

- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108)
- Section 106 implementing regulations (36 CFR §800)
- National Environmental Policy Act (42 U.S.C. §4321)
- Army regulations for implementing NEPA (32 CFR §651)
- Army Regulation 200-1: Environmental Protection and Enhancement

Important Concepts

a) Undertaking:

As defined by 36 CFR §800.16(y), an undertaking is a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license or approval; and those subject to state or local regulations administered pursuant to a delegation or approval by a Federal agency. The Cultural Resources Manager (CRM) evaluates projects and activities planned for implementation on lands owned, managed, or utilized by USAG-Pōhakuloa to determine if they meet this definition of an undertaking.

b) Effect:

Alteration to the characteristics of a historic property that qualify it for inclusion in, or eligibility for, the National Register of Historic Places (36 CFR §800.16(i)).

c) Adequate Opportunity to Comment:

- i) While the Hawai'i State Historic Preservation Division (SHPD) must be afforded a 30-day review period for most findings of effect and eligibility determinations (36 CFR §800.3(c)(4)), there is no formal timeline associated with Section 106 consultation to resolve Adverse Effects. The Army is expected to provide a reasonable amount of time and interaction with the SHPD to appropriately resolve situations of Adverse Effect (36 CFR §800.2(a)(4)).
- ii) Section 106 requires that Federal agencies offer the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on all proposed undertakings. The process defined in 36 CFR §800 provides that opportunity even though the ACHP does not directly participate in

the majority of consultations. The Army must specifically notify the ACHP of a finding of adverse effect (36 CFR §800.6(a)(1)) and offer the opportunity to participate in the consultation. The ACHP has 15-days to join in the consultation or decline participation.

Federal agencies shall also seek and consider the views of the public, as well as Native Hawaiian Organizations (NHOs), in a manner that reflects the nature and complexity of an undertaking and its effects on historic properties pursuant to 36 CFR §800.2(d)(2). In disseminating information to the public, an Agency is permitted to use existing public information portals established to comply with other planning and environmental reviews.

d) Historic Property:

Historic Property includes all properties that meet the criteria for listing in the National Register of Historic Places (NRHP). This determination is made by the Federal agency official, and requires SHPD concurrence.

Standard Section 106 4-Step Process

Army responsibilities in these regulations follow a general 4-Step sequence:

- I. Initiate Section 106 Process
- II. Identify Historic Properties
- III. Assess Effects
- IV. Resolve Adverse Effects

The steps in the process may be combined in correspondence with SHPD and consulting parties, or may be addressed individually. SHPD has 30 days to respond to each finding or determination made by the federal agency.

Program Alternatives and Options

The regulations allow for the development of several different kinds of alternate processes to the standard Section 106 consultation process. There are a number of these Program Alternatives in effect at USAG-Pōhakuloa (see ICRMP section 6.4). The CRM determines which existing programmatic agreements and/or program alternatives may apply to a given undertaking.

Participants in NHPA Section 106 Process

a) Proponent

The proponent is responsible for contacting the CRM *as early as possible in the planning process*. Early involvement of the CRM is a specific requirement of the implementing regulations for NHPA, AR 200-1, and Army regulations for implementing NEPA. Timely review of proposed projects by the CRM will allow USAG-Pōhakuloa time to identify and resolve cultural resources issues in a timely and efficient manner. In many instances, it is the proponent’s responsibility to program funding for cultural resources surveys, evaluations, and mitigation measures. Early identification of these needs is crucial for proper project budgeting.

Proponent responsibilities:

- Notification to the CRM of a proposed action or undertaking for review
- Participation in defining the Area of Potential Effects (APE)
- Funding and support for identification of historic properties, finding of effect, and implementation of mitigation measures incorporated into project approvals
- Supply information needed by the CRM for official correspondence

- Assure that NEPA and NHPA compliance are properly coordinated
- Assure that any restrictions or agreement stipulations are incorporated into project designs, contracts, construction inspections, SOPs, etc.
- Keep written record of Section 106 completion and any resulting conditions on the project;
- Notify CRM of any material change to the project scale, scope, design parameters, timing, or other circumstances
- Notify the USAG-HI Environmental Division Chief, USAG-Pōhakuloa CRM, and USAG-HI NEPA Program Manager when the implementation of the project is not in accord with or lacking any of the provisions upon which the Section 106 resolution depends

b) USAG-Pōhakuloa Cultural Resources Manager (CRM)

The CRM, representing the Garrison Commander, is responsible for facilitating Section 106 compliance and consideration of cultural resources. The CRM is responsible for oversight of the Section 106 compliance process; preparing the proper finding of effect; and for managing consultation with external agencies, organizations, and interested individuals.

CRM responsibilities:

- Review pertinent project planning documents for proposed or possible undertakings at early and subsequent stages of planning to identify cultural resource issues, applicable procedures, or needs for further information gathering, and consultations to complete Section 106 responsibilities.
- Assist proponents in defining appropriate APE for undertakings.
- Inform proponent of any known historic properties in or near the APE, and make initial assessment regarding additional identification efforts needed to support a finding of effect.
- Provide direction regarding alternative procedures and options for achieving compliance with Section 106 for projects under consideration. The CRM shall prepare the appropriate finding of effect.
- Request from proponents additional technical project information as needed for official correspondence with SHPD, the ACHP, consulting parties, or other interested parties.
- Draft official correspondence with SHPD, ACHP, consulting parties, or other interested parties.
- Coordinate consultations involving NHOs, SHPD, ACHP, other consulting parties, or other interested parties.
- Coordinate Section 106 consultation with NEPA review, as appropriate.

c) **Advisory Council on Historic Preservation (ACHP)** is an independent federal agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy. The ACHP is composed of twenty-three statutorily designated members and a small professional staff with offices in Washington, D.C (<http://www.achp.gov/aboutachp.html>)

d) **State Historic Preservation Officers (SHPO)** administer the national historic preservation program at the State level, review National Register of Historic Places nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with Federal agencies during Section 106 review. SHPOs are designated by the governor of their respective State or territory (<http://www.achp.gov/shpo.html>). The DLNR Chair is the SHPO for the State of Hawai'i, supported by the professional staff in the State Historic Preservation Division (SHPD).

e) **Native Hawaiian Organizations** are organizations that serve and represent the interests of Native Hawaiians, have a primary and stated purpose of providing services to Native Hawaiians, and have

expertise in Native Hawaiian affairs (DoDI 4710.03). The term "Native Hawaiians" means any individual who is a descendent of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now constitutes the State of Hawai'i (Public Law 103-150).

- f) **Interested Parties:** may include individuals or organizations with a demonstrated interest in the undertaking, including a legal or economic interest, or who are concerned with the undertaking's effects on historic properties (<http://www.achp.gov/apptoolkit.html>).

Section 106 Procedure

I. Initiate Section 106 Process

Establish the Undertaking

Determine whether the undertaking is the type of activity that has the potential to affect historic properties, including physical changes such as modification of buildings or land disturbance, or by indirect effects of noise, vibration or visual intrusions. The proponent organization is generally responsible for ensuring that undertakings comply with Section 106 of the NHPA, for funding measures needed to establish compliance, and for ensuring that compliance documentation is part of the administrative record pertinent to the undertaking. AR 200-1 defines proponent as "the unit, element, or organization that is responsible for initiating and/or carrying out the proposed action." Proponent responsibilities with respect to environmental reviews are noted in 32 CFR §651.4(q).

Identify Consulting Parties

The Army shall identify the appropriate points for seeking public input and for notifying the public of proposed actions. The Army regularly consults with the SHPD, NHOs, individuals and organizations with expressed interest in kinds of undertakings or the areas within which the undertakings are conducted. The ACHP participates in some consultations, especially for those that have a finding of Adverse Effects. The ACHP frequently chooses not to participate unless specifically requested by one of the consulting parties or by the Army.

II. Identify Historic Properties

Defining the APE

The APE is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." (36 CFR §800.16(d)). The CRM is responsible for coordinating with appropriate parties to identify the APE, which include but are not limited to, the SHPD, project managers, engineers and proponents of the undertaking. The CRM may request additional documentation for the proposed project under review to accurately determine the APE. The size of the APE is of sufficient size to encompass potential direct and indirect effects.

Identifying Historic Properties within the APE

The CRM will determine whether any historic properties are already known within the APE. In consultation with SHPD as needed, the CRM will determine if further measures are needed to complete a reasonable and good faith effort to locate and document historic properties that may be affected by specified undertakings. The proponent may need to assist in providing resources to carry out the required identification measures.

AR 200-1 6-4(9), states "Treat (assume) that all historic sites are eligible (that is, off-limits) until the SHPO concurs with the federal finding of non-eligible." AR 200-1 6-4(9) further stipulates "Nominate...only those properties that the Army plans to transfer out of Federal management through

privatization efforts. Nominate other properties only when justified by exceptional circumstances.” AR 200-1 1-5(e) identifies the Assistant Secretary of the Army for Installations and the Environment as the Army's senior policy level official for historic preservation and as the Federal Preservation Officer for oversight and coordination of Army Activities under NHPA, including approving and signing Army National Register of Historic Places nominations for Federally-owned or -controlled historic properties. Unless there is an unresolvable dispute, the eligibility of a property is settled through a determination documented by the Army, and concurrence (or no objection) from the SHPO. Disputes as to eligibility may be decided by the Keeper of the National Register within 45 days (36 CFR 63.2(d)). If the SHPO does not respond to a determination of eligibility within 30 days, the Army can proceed to assessing the effects of the undertaking.

III. Assess Effects

The Army will review the information regarding the proposed undertaking along with the information regarding historic properties in the APE and make one of several findings. The Army will send the finding to the SHPD and other consulting parties for review. The table below summarizes the findings of effect, information that must be available to consulting parties, and administrative constraints. The Federal agency must consult with SHPD to obtain concurrence. Concerns raised by consulting parties will be taken into account by the Federal agency.

No Historic Properties Affected (NHPA). This finding is appropriate if the steps to identify historic properties confirm that there are no historic properties within the APE. This finding is also appropriate in the circumstance that there are historic properties within the APE, but the undertaking as proposed will not affect them (36 CFR 800.4(d)(1)). The SHPD and consulting parties should be notified of the finding and the information supporting it. If SHPD concurs with the finding or does not object within thirty days, the Army may document the response and implement the undertaking with no further responsibilities under Section 106 of the NHPA. Comments received from other consulting parties within the thirty day review period will be taken into account by the Army.

No Adverse Effect. This finding is appropriate in circumstances where there are historic properties within the APE but the undertaking will not adversely effect those elements that make the properties eligible for the NRHP. For some undertakings, this finding may be dependent on specified conditions that become binding commitments. A finding of No Adverse Effect may be appropriately applied to rehabilitation of historic buildings, for instance, if that rehabilitation is required to conform to the Standards for Rehabilitation promulgated by the Secretary of the Interior. Conditions attached to the undertaking must be aimed at AVOIDING adverse effect, not at mitigation of or compensation for adverse effect. The Army must notify the SHPD and consulting parties of the finding and provide the information supporting it. If SHPD concurs with the finding or there are no requests for additional information submitted within thirty days, the Army may document the response and implement the undertaking with no further responsibilities under Section 106 of the NHPA. Comments received from other consulting parties within the thirty day review period will be taken into account by the Army.

Adverse Effect. This finding is appropriate if the proposed undertaking will cause or is likely to cause adverse effect to one or more historic properties. Adverse Effect is a change in the character or use of a historic property and its setting that diminishes any of the aspects of integrity of the characteristics that qualify the property for the National Register of Historic Places.

Findings of Effect, Supporting Information, Completion of Process				
Army Finding	Criteria	Supporting Information	Response period	Completion or Resolution
No Historic Properties Affected NHPA	Either No historic properties in APE OR Historic Properties present but not affected by undertaking	<ul style="list-style-type: none"> • Description of Undertaking; • APE; • Steps taken to Identify Historic Properties • Basis for Finding no historic properties, or no effects to historic properties 36 CFR 800.11(d)	30 days for SHPD respond once complete information is received. If additional information is requested, there are no longer set timelines. Consulting parties must respond within 30 days in order to have their comments considered.	Letter of concurrence from SHPD, or MFR documenting no timely response
No Adverse Effect NAE	Historic Properties present or likely within the APE, but the undertaking will not cause adverse effects; or conditions imposed on the undertaking successfully AVOID adverse effect (often rehabilitation of historic buildings consistent with Secretary of the Interior's Standards)	<ul style="list-style-type: none"> • Description of undertaking; • APE; • Steps taken to Identify Historic Properties; • Description of the Historic Properties, including the characteristics that qualify them for the NRHP. • Explanation of how the Criteria of Adverse Effect were found applicable or not applicable (including conditions to avoid, minimize or mitigate Adverse Effects) • Summaries of the views of consulting parties and the public. 36 CFR 800.11(e)	30 days for SHPD respond once complete information is received. If additional information is requested, there are no longer set timelines. Consulting parties must respond within 30 days in order to have their comments considered.	Letter of concurrence from SHPD, or MFR documenting no timely objections.

<p>Adverse Effect</p> <p>AE</p>	<p>Historic Properties present; at least one will suffer unavoidable adverse effects</p>	<ul style="list-style-type: none"> • Description of undertaking; • APE; • Steps taken to Identify Historic Properties; • Description of the Historic Properties, including the characteristics that qualify them for the NRHP. • Explanation of how the Criteria of Adverse Effect were found applicable or not applicable (including conditions to avoid, minimize or mitigate Adverse Effects) • Summaries of the views of consulting parties and the public. <p>36 CFR 800.11(e)</p>		<p>Completion by implementing MOA, or by requesting ACHP formal comments after terminating unsuccessful consultations</p>
<p>Consultations to Resolve Finding of Adverse Effect</p>			<p>No Formal time limit. Consultations continue until successful agreement (MOA) or one party terminates.</p>	<p>Completion by implementing MOA, or by requesting ACHP formal comments after terminating unsuccessful consultation</p>

Table 2: Findings of Effect, Supporting Information, Completion of Process

IV. Resolve Adverse Effects

If the Army in consultation with SHPD determines that the undertaking will result in a finding of adverse effect to an historic property, then the CRM consults with the SHPD on behalf of the Garrison Commander (GC), including the project proponent and other consulting parties in reviewing project alternatives to avoid, minimize, and/or mitigate the adverse effects. The goal of this consultation is to resolve adverse effects.

The following list provides some examples of adverse effects:

- Physical destruction, demolition, or damage to all or part of an historic property;
- Alterations to the property that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR §68). Alterations may include: restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, 9/11 Security Improvements, installation of green energy technology, and provisions for handicapped accessibility;
- Relocation of the property;
- Change in the property's use or physical features that alter the setting;
- Neglect of the property that leads to deterioration (except when the neglect and deterioration are recognized qualities of the property's religious and cultural significance to an indigenous organization);
- Transfer or lease of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance;
- Introduction of visual, atmospheric, or audible elements that indirectly affect the integrity of historic property, such as elimination of open space or a scenic view and/or introduction of a visual element that is incompatible, out of scale, in great contrast, or out of character with the surrounding area; and
- Cumulative impacts in the past, present, and reasonably foreseeable future, which may be individually minor but collectively significant.

Consulting to Resolve Adverse Effects

For projects in which the finding of adverse effect cannot be avoided, the CRM initiates consultations to resolve adverse effects. The Army will notify the ACHP of the finding of adverse effect and invite the ACHP to participate in consultations. The Army consults with SHPO and other consulting parties to reach agreement on measures to resolve the adverse effects. Successful consultations will be documented in a Memorandum of Agreement (MOA).

The IMCOM and U.S. Army Environmental Command (USAEC) must review and approve a draft of the MOA to assure legal and technical sufficiency and consistency with Department of the Army policy. This review and approval must be completed before the Garrison Commander signs the MOA as the Agency Official for the Army. When all signatory parties sign the MOA and a copy of the executed MOA is sent to the ACHP and the signatory parties, then Section 106 is complete. The MOA is a legally binding document.

The project proponent is responsible for ensuring its activities are implemented as stipulated in the signed MOA (or other agreement document), ensuring that the stipulations are properly incorporated into subsequent contracts, project management inspections, budgets, and performance schedules. The project proponent will provide the CRM with evidence that the agreed upon stipulations have in fact been properly incorporated in project implementation documents. If project proponents find that any aspect of the project is not implemented in accordance with the binding stipulations, the proponent must promptly notify the USAG-HI Environmental Division Chief, USAG-HI NEPA Program Manager, and

USAG-Pōhakuloa CRM for review and consideration, and may be subject to further Section 106 review and consultation.

Terminating Consultation

If the USAG-Pōhakuloa GC, SHPD, and ACHP (if participating) fail to agree on how to resolve adverse effects, the parties may terminate consultation. If termination occurs, the ACHP will submit its final advisory comments within 45 days to the Secretary of the Army as Head of the Federal Agency, and the Army must take into account the ACHP's comments in reaching a final decision on the undertaking. The Army shall prepare a summary of the final decision on the undertaking that documents the rationale for the decision and evidence that the Army considered the comments from the ACHP. This final decision document will be reviewed by IMCOM and ACSIM and then submitted to the ACHP and other consulting parties.

Coordinating the NEPA Process with NHPA Section 106 Regulations

The CRM may use the process and documentation required for the preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) to comply with Section 106 in lieu of the procedures set forth in this SOP and stipulated in 36 CFR § 800.3-800.6; however, the SHPD and ACHP must be notified when USAG-Pōhakuloa intends to combine NEPA and Section 106. When combining NEPA and Section 106, Federal agencies should consider their Section 106 responsibilities early in the NEPA process, and plan their public participation, analysis, and review so they can meet the purposes and requirements of both statutes. In coordination with the NEPA program manager, the CRM ensures that preparation of an EA or EIS includes proper scoping, identification of historic properties, assessment of effects upon them, and consultation leading to resolution of any adverse effects.

Guidance for National Historic Landmarks

NHPA Section 110(f) (54 U.S.C. 306107) requires the Army to undertake planning and actions to minimize harm to National Historic Landmarks (NHLs) and provide reasonable opportunity for the ACHP to comment on undertakings that adversely affect NHLs. When an undertaking affecting an NHL requires consultation, the CRM, acting on behalf of the GC, will notify the National Park Service (NPS) and invite the NPS to participate in the consultation if the proposed undertaking may result in a finding of adverse effect pursuant to 36 CFR 800.10(c).

Guidance for consideration of places with religious and cultural significance for Native Hawaiian Organizations

Places of cultural and religious significance to a NHO may be accorded certain standing and consideration. NHPA Section 106 (36 CFR §800) requires Federal agencies to consult with NHOs in order to identify properties of traditional religious and cultural importance that may be affected by a proposed undertaking and to gather information from NHOs about these properties while also acknowledging that "Indian tribes and NHOs possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them" (36 CFR § 800(4)(c)(1)). Properties of religious and cultural importance to NHOs will be evaluated for NRHP eligibility and effects of the undertaking as outlined above.

5.2. SOP 2: Identify and Evaluate Historic Properties

Introduction

NHPA requires the Army to identify and evaluate buildings, structures, objects, districts, and sites under the agency's jurisdiction or control, or that may be affected by agency actions that are eligible for listing in the NRHP. Priorities for surveys at USAG-Pōhakuloa are determined annually based on available funding, projected mission impacts, and proposed undertakings.

Implementing Regulations

- NHPA (54 U.S.C. 306101(a) and 306102)
- National Register of Historic Places (NRHP) (54 U.S.C. 302101)
- Secretary of the Interior's Professional Qualification Standards (36 CFR §61)
- AR 200-1: Environmental Protection and Enhancement

Important Concepts

The goal of **identification** is to establish whether the area inspected contains the types of properties that may be eligible for the NRHP.

The purpose of **evaluation** is to collect sufficient information about identified properties to determine if they are eligible for the NRHP, including identification of the characteristics that contribute to eligibility and the condition and integrity of those characteristics. Evaluation leads to a determination of eligibility (DOE). USAG-Pōhakuloa uses the information provided by surveys to make formal determinations of eligibility for the NRHP which are submitted to SHPD for concurrence. Evaluation requires an assessment of collected data against the NRHP Criteria. Priority for evaluations is determined by projected mission impacts and anticipated undertakings.

NRHP Criteria

To be eligible for the NRHP, a property must be significant in American history, architecture, archeology, engineering, or culture. The property must meet one or more of the four National Register criteria:

Criterion A: Associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B: Associated with the lives of significant persons in our past; or

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: Yield or may be likely to yield, information important in history or prehistory.

The property must also possess integrity of location, design, setting, materials, workmanship, feeling, and/or association.

To date, most of the resources identified at PTA have been archaeological sites. USAG-Pōhakuloa maintains an Access Inventory database of eligible and non-eligible archaeological sites and other properties (see Appendix D for USAG-Pōhakuloa Inventory). Locations of archaeological sites are maintained in a GIS. Hard copy site files are also maintained in the USAG-Pōhakuloa Cultural Resources Section. This inventory includes other property types, such as structures, for inventory purposes. Historic

building information is maintained by USAG-HI Real Property Office and tracked in GFEBs and other Real Property databases (see Appendix D for USAG-Pōhakuloa Inventory).

Procedures

Specific procedures for identification and evaluation surveys are determined by the nature of the resource and the purpose of the survey. For most property types, particularly archaeological sites, minimum information collected for evaluation of each property should include time period, function, ethnic affiliation, location (coordinates, map), measured area of property, boundaries and justification for boundaries, property description including condition and integrity, representative photographs, and a scaled site plan map. This minimum information was not consistently collected for all sites tracked in the USAG-Pōhakuloa Inventory, and in some cases additional documentation may be required. Specific site documentation requirements are established in the work plans developed for each project.

5.3. SOP 3: Unanticipated Discovery of Historic Properties and Inadvertent Discovery of Human Remains and/or Cultural Items

Introduction

The USAG-Pōhakuloa Cultural Resources Section is engaged in continual efforts to survey and inventory Army lands; however, in the daily conduct of Army operations at USAG-Pōhakuloa, there is always the possibility of discovering previously unknown or unidentified cultural resources. Erosion by wind or water may also result in the unanticipated discovery of historic properties and/or human remains and cultural objects.

The appropriate response to an unanticipated or inadvertent discovery varies depending on the circumstances of the discovery, and the manner in which the activity leading to the discovery may have incorporated advance planning for discoveries in its implementation. The most important of these factors include:

- Whether the activity has a formal agreement in place with stipulations addressing discoveries
- Whether the activity has a formal agreement in place, but without specific stipulations addressing discoveries.
- Whether the discovery includes cultural items as defined by NAGPRA
- Whether the discovery includes human remains or other circumstances that require attention from law enforcement personnel
- Whether there is no activity or undertaking in place that leads to the discovery.

The CRM should be involved in the planning of undertakings in order to assess the potential for the discovery of Native Hawaiian burials and archaeological sites and to assure that appropriate measures to respond to such discoveries have been incorporated into the approvals and implementation plans for those undertakings. The CRM should also be identified as a point-of-contact to be notified immediately if human remains, archaeological deposits, or other culturally significant materials are inadvertently discovered on installation property.

Laws, Implementing Regulations, and Guidance

- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- Native American Graves Protection and Repatriation Act (25 U.S.C §3001-3013) and implementing regulations (43 CFR §10)
- American Indian Religious Freedom Act (42 U.S.C. § 1996-1996a)
- Archaeological Resources Protection Act (16 U.S.C. § 470aa-470ll) and implementing regulations (43 CFR §7)
- National Environmental Policy Act (42 U.S.C. § 4321-4370c) and Army regulations for implementing NEPA (32 CFR §651)
- DoD Instruction 4710.03: Consultation with Native Hawaiian Organizations (NHOs)
- AR 200-1: Environmental Protection and Enhancement

Each statute mandates compliance with independent requirements; therefore it is important to remember that compliance with one statutory requirement may not satisfy all requirements.

Important Concepts

Historic property, as defined by NHPA (54 U.S.C. §300101 et seq), is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP).

Archaeological resource, as defined by Section 3(1) of ARPA (16 U.S.C. 470bb[1]), includes “Any material remains of human life or activities that are at least 100 years old and that are of archaeological interest.”

Cultural item. According to Section 2(3) of NAGPRA (25 U.S.C. 3001[3]), cultural items include human remains, associated and unassociated funerary remains, sacred objects, and objects of cultural patrimony.

Inadvertent discovery is the unanticipated encounter or detection of human remains, funerary objects, sacred objects, or objects of cultural patrimony found under or on the surface of Federal or tribal lands pursuant to section 3 (d) of NAGPRA (43 CFR §10.2 (g)(4)).

Unanticipated discovery, as defined by 36 CFR §800.6(c)(6), is the “subsequent discovery or identification of additional historic properties affected by the undertaking.”

Post-review discovery occurs when historic properties are discovered, or when unanticipated effects on historic properties occur, after the section 106 process is complete without establishing a process pursuant to 36 CFR §800.14(b) that governs actions to be taken if and when historic properties are discovered during the implementation of an undertaking (36 CFR §800.13).

ARPA and NAGPRA Statements for inclusion with Permits, Leases, and Contracts

The following clauses shall be included in all contracts executed on Hawai‘i Island that have the potential to affect historic properties, archaeological resources or cultural items:

“It is a felony offense, punishable by a fine up to \$20,000 and imprisonment for up to one year, for any person who attempts to or excavates, removes, damages, or otherwise alters or defaces any resources located on [name of installation], or for any person to offer to or sell, purchase, transport, or receive any resource which was excavated or removed from Federal lands (Archaeological Resources Protection Act, 16 U.S.C. 470aa-470mm).”

- a. “If previously unidentified historical, archaeological, or cultural resources are found during construction operations, the contractor shall immediately suspend work in the area of the discovery and provide telephone notification to the agency official or their representative and to the USAG-Pōhakuloa Directorate of Public Works Environmental Division, Cultural Resources Manager (808-436-4280). The contractor must follow-up with written confirmation of the discovery to those same parties as soon as possible. Resources covered by this provision include, but are not limited to: human burials or skeletal remains; petroglyphs; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, stone paving, walls, or other constructed features; any indication of habitation, agriculture, or other human activities. The contractor shall not alter or disturb any discovery and shall cease all activities that may result in impact to or the destruction of discovered resources. The contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.”

Procedures

- I. **Discovery.** In the event that artifacts, human remains, bottles, rock carvings or paintings, tools, structures or portions thereof, graves or other archaeological resources not previously known are identified in the course of an activity, the discoverer shall immediately cease activity in the vicinity of the find, secure the area to ensure that no additional harm comes to the find, and notify the USAG-Pōhakuloa CRM.
- II. **Preliminary Assessment, Protection, and Verification.** When notified of an inadvertent discovery of human remains or other cultural items, the proponent, CRM, and/or USAG-Pōhakuloa Department of Army Police and Criminal Investigation Division (CID) will determine if the remains are:
 - 1) **Associated with a recent crime scene:** If, upon examination by the Army Police and CID, the remains appear to be human and associated with a crime scene, then all activity will cease within an area reasonably needed to protect the site pending further investigation.
 - 2) **Remains are of Native Hawaiian origin:** If the remains are determined to be Native Hawaiian and not associated with a crime, the CRM must make a written field evaluation of the circumstances of the discovery, the condition and contents of the burial, including any associated artifacts, the primary context of the remains and any artifacts, and their antiquity and significance (see *Figure 1: National NAGPRA Guidance for Inadvertent Discoveries on Federal Lands*).
 - 3) **Remains are identified as non-human:** If the remains are determined to be non-human, then the CRM will determine if archaeological contexts are present that need to be evaluated pursuant to the NHPA.
 - 4) **Agreements:** If the activity that discovered the find has an applicable agreement document executed in accordance with Section 106 and/or NAGPRA, the Army shall follow the stipulations for Inadvertent or Unanticipated Discoveries established in those agreement documents.
 - 5) **No Agreements:** If the activity that discovered the find does not have an applicable agreement document, then USAG-Pōhakuloa (or USAG-HI) will follow the requirements of 43 CFR § 10.4 and 36 CFR § 800.13 for post-review discovery, as appropriate.
- III. **Resumption of Activity.** The activity that resulted in the inadvertent discovery of Native Hawaiian human remains or cultural objects may
 - 1) resume thirty (30) days after certification by the GC of the receipt of the notification sent by the CRM; or
 - 2) activity may resume if the treatment is documented in a written binding agreement between the installation and affiliated NHOs that adopts a plan for stabilization and protection of the site with no removal of human remains and cultural objects, excavation or removal of the human remains or cultural objects, or their disposition to lineal descendants or NHOs with priority of custody.

Inadvertent Discoveries on Federal Lands After November 16, 1990

An *inadvertent* discovery is one for which no plan of action was developed prior to the discovery.

Notification

The person who makes the discovery must **immediately notify the responsible Federal official** by telephone and provide written confirmation to the responsible Federal official.

Stop Work

If the inadvertent discovery occurred in connection with an on-going activity, the person must **cease the activity** in the area of the inadvertent discovery and **make a reasonable effort to protect the human remains and other cultural items**.

Initiating Consultation

No later than three working days after receiving written confirmation of the notification, the responsible Federal agency official must **certify receipt of the notification**, and take immediate steps, if necessary, to **further secure and protect the human remains and other cultural items**. **NOTE:** activity that resulted in the discovery may resume thirty days after the Federal agency official certifies receipt of the notification.

The responsible Federal agency official must also **notify by telephone** (with written confirmation) and **initiate consultation** with **any known lineal descendant** and the **Indian tribes and Native Hawaiian organizations** –

- **who are or are likely to be culturally affiliated with the human remains and other cultural items;**
- **on whose aboriginal lands the remains and cultural items were discovered; and**
- **who are reasonably known to have a cultural relationship to the human remains and other cultural items.**

Consultation is initiated with a written notification. The written notification must propose a time and place for meetings or consultation.

During Consultation

The **purpose** of consultation is to **help the Federal agency determine who is entitled to custody** of the human remains and other cultural items under NAGPRA so that the disposition process can be completed, and to **discuss the Federal agency's proposed treatment** of the human remains and other cultural items pending disposition.

The Federal agency official must **provide in writing** –

- a list of all lineal descendants, Indian tribes, or Native Hawaiian organizations that are being, or have been, consulted; and
- an indication that additional documentation will be provided on request.

The Federal agency official **must request, as appropriate** –

- names and addresses of the Indian tribe official who will act as the tribe's representative in consultation;
- names and appropriate methods to contact lineal descendants;
- recommendations on how consultation should be conducted; and
- the kinds of cultural items that are considered to be unassociated funerary objects, sacred objects, or objects of cultural patrimony.

After Consultation – Written Plan of Action

The Federal agency official must prepare, approve, and sign a written plan of action. The plan of action must document the kinds of objects to be considered as cultural items; the planned treatment, care, and handling, including traditional treatment, of human remains and other cultural items; the planned archeological recording of the human remains and other cultural items; the kinds of analysis planned for each kind of object; and the nature of reports to be prepared.

The written plan of action must also include –

- the **specific information used to determine custody** of the human remains and other cultural items; and
- the **planned disposition** of the human remains and other cultural items.

Custody must be determined in accordance with 25 USC 3002 (a), "Priority of Ownership," and 43 CFR 10.6, "Priority of Custody."

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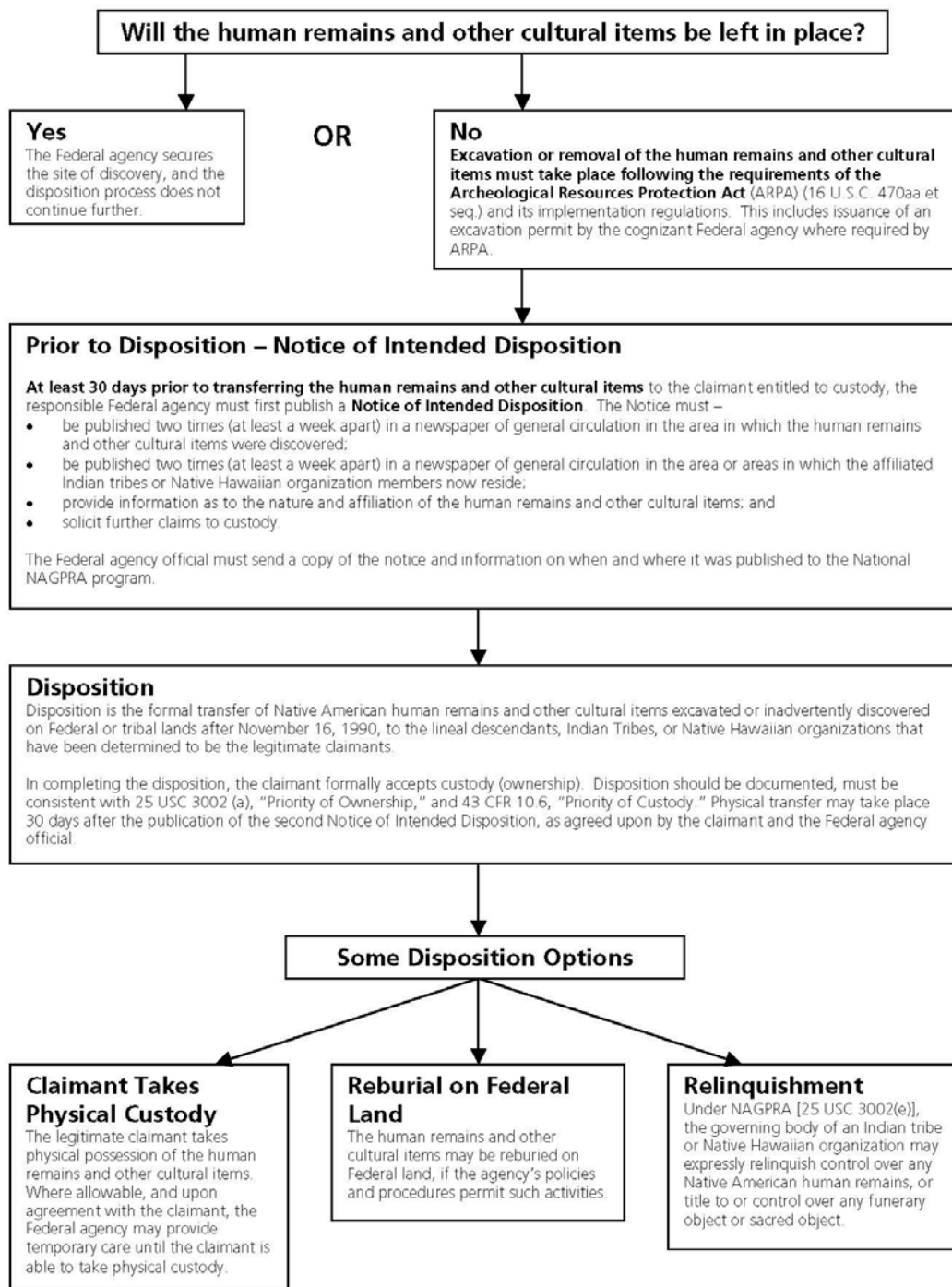


Figure 1: National NAGPRA Guidance for Inadvertent Discoveries on Federal Lands
https://www.nps.gov/nagpra/TRAINING/Intentional_Excavations.pdf

5.4. SOP 4: Emergency Situations

Introduction

This SOP describes a framework to ensure protection of cultural resources from unnecessary damage and emergency procedures in the event of an emergency situation, such as a major natural disaster or imminent threat.

Laws and Implementing Regulations

- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- Archaeological Resources Protection Act (16 U.S.C. § 470aa-470ll) and implementing regulations (43 CFR §7)
- Secretary of the Interior’s Standards for Treatment of Historic Properties (36 CFR §68)
- Waiver of Federal Agency Responsibilities Under Section 110 of the National Historic Preservation Act (36 CFR §78)
- AR 200-1: Environmental Protection and Enhancement

Important Concepts

Emergency situations, as defined by 36 CFR §800, allows for expedited review in the event of a disaster or emergency declared by the President, the Governor of a State, or another immediate threat to life or property where the agency has not developed procedures in advance.

USAG-Pōhakuloa will exercise feasible and prudent precautions to avoid and reduce the risk of damage to historic properties in the event of emergency responses. In cases where a historic property sustains damage as a result of those responses, the incident shall be reported and a reasonable effort shall be made to identify the responsible parties, if any, and to repair or replace the damaged resource or to mitigate the damage.

The project proponent or discoverer of the damaged historic properties is responsible for notifying the CRM immediately.

Emergencies

No requirement of this or any other SOP shall be used to delay immediate actions that are required in an emergency to protect health and human safety or avoid substantial loss of property. “Emergency” is defined here as an immediate and imminent threat to life, health, or property (36 CFR § 800.12).

In cases where it is determined by the onsite Federal Agency head, or designee, that an emergency exists, as defined above, all reasonable and prudent efforts shall be made to avoid or minimize harm to historic properties that may be caused by the implementation of emergency actions (36 CFR §78.3). In this case, a “Federal Agency Head” is defined as the highest administration official, or designee, representing the Federal agency during an emergency (36 CFR §78.2).

According to 36 CFR §800.12(d), rescue and salvage operations conducted in response to an immediate threat to life or property are exempt from the provisions of NHPA Section 106. Expedited review, where possible, is provided for in 36 CFR § 800.12 for undertakings initiated within 30 days of the declaration of an emergency by the appropriate authority. The agency may request an extension of the period of applicability for emergency procedures from the Council, or must consult with the SHPD under the normal

process outlined in 36 CFR § 800.3 through 800.6. Once an emergency has been identified, the Federal Agency head or designee shall notify the CRM as soon as possible. The CRM shall assess potential impacts to cultural resources, work with responders to avoid and protect cultural resources as possible, and ensure that the requirements of 36 CFR § 800.12 are followed if no prior plan is in place.

The requirements of Section 110 of the NHPA (54 U.S.C. 306101(a)) are likewise waived in the event of an emergency as follows:

“When a Federal Agency Head determines, under extraordinary circumstances, that there is an imminent threat of a major natural disaster or an imminent threat to national security such that an emergency action is necessary to the preservation of human life or property, and that such emergency action would be impeded if the Federal agency were to concurrently meet its historic preservation responsibilities under section 110 of the Act, that Federal Agency Head may immediately waive all or part of those responsibilities...” (36 CFR §78.3).

During an emergency situation when immediate repairs or building modifications are required, emergency work should be temporary and removable in case the work does not conform to the Secretary of the Interior’s Standards (36 CFR §68). Ideally, the CRM is notified before any replacement work takes place to evaluate the proposed changes and determine the necessary documentation requirements, if any. If changes to any elements of a historic building are unavoidable, the implementing activity must document the original condition and materials of the affected building elements with drawings, photographs, and written descriptions. Upon completion of all such work, the proponent will submit a brief written report to the CRM that describes the nature and location of the emergency repair or replacement.

5.5. SOP 5: NAGPRA: Planned Activities and Comprehensive Agreements

Introduction

USAG-Pōhakuloa must comply with the Native American Graves Protection and Repatriation Act (NAGPRA) when planning intentional excavations or archaeological activities that are likely to disturb cultural items. NAGPRA requires that Native Hawaiian human remains, associated funerary objects, sacred objects, and objects of cultural patrimony be excavated or removed only after consultation with lineal descendants or potentially affiliated Native Hawaiian organizations that have priority of custody over these items.

Implementing Regulations

- Native American Graves Protection and Repatriation Act (NAGPRA), ((25 U.S.C §3002 (3)(c)), 43 CFR §10)
- DoD Instruction 4710.03: Consultation with Native Hawaiian Organizations
- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)

Important Concepts

Intentional excavation is defined in 43 CFR §10.2(g)(3) as “the planned archeological removal of human remains, funerary objects, sacred objects, or objects of cultural patrimony found under or on the surface of Federal or tribal lands.”

Planned activity likely to disturb cultural items

The term “planned activity likely to disturb cultural items” encompasses any activity that has the potential to discover or disturb cultural items as defined by NAGPRA (Deputy Federal Preservation Officer 2016). It is not limited to excavations intended for archaeological purposes, though it may encompass those as well.

If a planned activity is also subject to NHPA Section 106, then consultation and any subsequent agreements under NHPA should be coordinated with the requirements of NAGPRA (43 CFR §10.3(c)(2) and §10.5). Compliance with NAGPRA does not absolve a federal agency from its responsibilities under NHPA or vice versa.

Intentional Excavation

Before issuing any approvals or permits for excavations that are likely to result in the discovery of Native Hawaiian human remains or cultural objects, the CRM must provide proper written notification to the NHOs that are likely to be culturally affiliated. This notice must describe the planned activity, its general location, the basis for the determination that human remains and cultural objects may be encountered during excavation, and the basis for the determination of likely custody pursuant to 43 CFR §10.6.

Treatment and Disposition: Native Hawaiian Human Remains

The treatment and disposition of any Native Hawaiian human remains and cultural items recovered from USAG-Pōhakuloa lands shall be determined in consultation with lineal descendants or culturally affiliated NHO(s) as required by 25 U.S.C. §3002 (3)(a), 43 CFR §10.3(2) and §10.4(d)(iv).

- The treatment, stabilization and protection regarding Native Hawaiian human remains and cultural items encountered during planned archaeological excavations are developed before the commencement of the project. Culturally affiliated NHOs are notified in writing regarding proposed consultation.
- An organization that wishes to make a claim of ownership of human remains or cultural items must be able to demonstrate an affiliation by a preponderance of evidence according to the criteria for the priority of custody specified in 25 U.S.C. §3002 (3)(a) and 43 CFR §10.6.
- The determination of an appropriate disposition for the human remains and/or cultural items shall be determined in consultation with lineal descendants or culturally affiliated NHOs.

Upon request, sacred objects and objects of cultural patrimony shall be returned where (a) The requesting party is the direct lineal descendant of an individual who owned the sacred object; (b) The requesting NHO can show that the object was owned or controlled by the organization; and/or (c) The requesting NHO can show that the sacred object was owned or controlled by a member thereof.

Prior to the disposition of human remains and cultural items to the lineal descendants or culturally affiliated NHO(s), USAG-Pōhakuloa must publish notices of the proposed disposition in local newspapers where the human remains and cultural objects were discovered and where lineal descendants or affiliated Native Hawaiian(s) currently reside.

If a single, legitimate claimant cannot be identified, consultation shall continue with the consulting organizations to consider possible alternatives for affiliation, treatment, and disposition.

Each restoration and reinternment shall require that USAG-Pōhakuloa provide an opportunity for appropriate Native Hawaiian religious ceremony or ceremonies pursuant to the American Indian Religious Freedom Act (AIRFA) [42 U.S.C. §1996-1996a], to the extent that is safe and feasible to do so.

The resolution of treatment and disposition issues must be documented in a written Plan of Action (POA) or Comprehensive Agreement (CA), pursuant to 43 CFR §10.3(2), 10.4(d)(2), and 10.5(e),(f) and Final Rule §10.7.

NAGPRA Plan of Action (POA) or Comprehensive Agreement (CA)

“Under the NAGPRA regulations (43 C.F.R. 10.3 and 10.5), a Federal agency must prepare, approve, and sign a POA if the agency intends to excavate or remove, or leave in place NAGPRA cultural items when these cultural items are exposed or are found already exposed, and does not wish for activity in the area of the exposed cultural items to halt. Excavating or removing, or leaving in place cultural items under a POA is known as an "intentional excavation." Exposing or finding already-exposed cultural items without a POA is known as an "inadvertent discovery." When a discovery occurs, any activity taking place in the area of the discovery must cease for 30 days. Under the regulations at 43 C.F.R. 10.4, the responsible agency official must initiate consultation on a discovery pursuant to section 10.5 of the regulations. Consultation, in turn, must result in an approved and signed POA (43 C.F.R. 10.5(e)). The regulations provide no exceptions to this rule. Thus, the agency must prepare, approve, and sign a POA even if no on-going activity is to occur. A POA must, at minimum, comply with the requirements at section 10.3(b)(1) of the regulations (which governs an "intentional excavation"). Following the effective date of the POA, exposing or finding already-exposed cultural items within the geographical area covered by the POA will

be an "intentional excavation," and will be excavated or removed, or left in place according to the terms of the POA" (National NAGPRA 2003).

Under 43 CFR §10.5, Federal agencies are encouraged to develop CAs where any undertaking or action on agency lands may affect NAGPRA cultural items. The purpose of these agreements is to address Army activities that could result in the intentional excavation or inadvertent discovery of human remains or other NAGPRA items. The CA will describe procedures for consulting with NHOs to determine custody, treatment, and disposition, thereby reducing project delays in the event of an inadvertent discovery.

Consultation is documented by (1) a written POA in accordance with 43 CFR §10.5(e) signed by the GC, or (2) a CA in accordance with 43 CFR §10.5(f) signed by the GC and official representatives of affiliated NHOs. Excavation or removal of cultural items may only proceed after consultation with lineal descendants or potentially affiliated NHO.

Dispute Resolution

Should any interested organization make a conflicting claim of cultural affiliation or dispute the methods of treatment or disposition of human remains and/or cultural objects as delineated herein, the GC shall notify the IMCOM—HQ and the USAEC. USAG-Pōhakuloa will continue consultation with the disputing parties, suggest that the disputing parties seek resolution among themselves, or refer the matter to the NAGPRA Review Committee in accordance with 43 CFR §10.17(b).

5.6. SOP 6: Archaeological Resources Protection Act of 1979 Compliance Process

Introduction

This SOP describes procedures for compliance with the Archaeological Resources Protection Act of 1979 (ARPA) and the final uniform regulations issued by the Department of Defense (32 CFR §229). ARPA protects archaeological sites and resources on public and tribal lands and describes what activities are considered violations of this regulation. ARPA also outlines the process of acquiring a permit for conducting archaeological research on, and conditions for removing artifacts from, these lands.

The law makes it a Federal felony for persons to excavate, remove, damage or otherwise deface any resource located on Federally-owned lands. The sale, purchase, or transfer of artifacts obtained in violation of the law is also a felony. The regulations contain definitions and guidelines for the enforcement of the act and set forth procedures and standards for the issuance of permits that are held as exceptions to the act.

Laws and Implementing Regulations

- Archaeological Resources Protection Act of 1979 (ARPA), Public Law 96-95; (93 Stat.721; 16 U.S.C. §470aa-II)
- Protection of Archaeological Resources: uniform regulations issued by the Department of Defense (32 CFR §229)

Important Concepts

- a) **Archaeological Resource:** ARPA and the implementing regulations define “archaeological resource” as any material remains of human life or activities that are at least 100 years of age and that are of archaeological interest (32 CFR §229.3(a)).
- b) **Federally owned lands:** ARPA defines “public lands” as those lands in which fee title is held by the United States (32 CFR §229.3(d)). At USAG-Pōhakuloa, Federally owned lands includes the lands assigned to the Army by Executive Order and purchased in fee simple, but does not apply to State leased lands.
- c) Investigation of looting or vandalism of an archaeological site requires a systematic examination of the crime scene by both a law enforcement investigator and a professional archaeologist, whether the matter is handled criminally or civilly. A law enforcement officer is responsible for investigating violations of the law and, therefore, directs the archaeological crime scene investigation process. The archaeologist provides forensic expertise on archaeological resources for the crime scene investigation, and may be requested to assist in other activities, such as taking the crime scene photographs, helping with the crime scene sketch, or providing assistance in collecting the archaeological evidence. In cases where proof may be insufficient to obtain a criminal conviction under the Act, or where deemed otherwise advisable, USAG-Pōhakuloa, after coordination with the Office of the Staff Judge Advocate (OSJA), may choose to assess a Civil Penalty under the provisions of 32 CFR §229.15. This procedure is particularly applicable to violations of the excavation permit provisions to prevent damage to known archaeological sites.

ARPA Permit Procedures

Under 32 CFR §229 and AR 200-1, any person may apply for a permit to excavate and/or remove archaeological resources from public lands. While AR 200-1 designates the Garrison Commander as the federal land manager for purposes of ARPA, in practice the ARPA permit is also considered a real property transaction under the jurisdiction of the Army Corps of Engineers, District Engineer.

- ARPA prohibits anyone from excavating or removing an archaeological resource from Federal land or Indian land without a permit from the appropriate land management agency.
- The CRM, on behalf of the Garrison Commander (GC), shall consult with Native Hawaiian organizations (NHOs) in order to identify and locate archaeological sites of traditional religious and cultural importance, and notify NHOs of any ARPA permit that has the potential to affect these sites.
- Army activities should also be coordinated with legislative mandates found in the National Historic Preservation Act (NHPA), the Native American Graves Protection and Repatriation Act, (NAGPRA), and the National Environmental Policy Act (NEPA).
- While the legislation specifies Indian tribes, consultation is not necessarily restricted to Indian tribes and can include Alaska Native villages and NHOs.

Once the Army issues an ARPA permit, the permit holder is responsible for all conditions set forth in related documents such as a NAGPRA Plan of Action (POA) or Memorandum of Agreement (MOA) pertaining to the methods and techniques approved for the excavation. Excavation may be monitored for compliance by the CRM, NHOs, or other authority. Failure to comply with permit stipulations can result in revocation of the permit and prosecution under the law.

Procedures for ARPA Violation (unpermitted excavations)

An ARPA investigation begins when an Army official first suspects or discovers a violation, or receives a report of such from a third party. Information provided by a witness should include a signed narrative statement describing the exact location, specific activity, people and any vehicles involved. Witnesses to suspected criminal activity should contact the Federal law enforcement officer and the CRM. Upon notification of suspected criminal activity, both a Federal law enforcement official and the CRM should visit the suspected crime scene as soon as possible.

Garrison law enforcement personnel, Criminal Investigation Division (CID), Office of the Staff Judge Advocate (OSJA), and the USAG-Pōhakuloa Cultural Resources Section should ensure that there are personnel in each of these capacities that have received training in the technical procedures for effective investigation, documentation, and prosecution of ARPA violations.

5.7. SOP 7: Native Hawaiian Consultation

Introduction

Native Hawaiian consultation is defined in DoDI 4710.03 as “seeking, discussing, and considering the views of other participants and, when feasible, seeking a mutually acceptable understanding regarding the matters at hand” and giving that information serious consideration in the decision-making process. “Consultation is most effective when conducted in the context of an ongoing relationship, the DoD Components are encouraged to, insofar as practicable, establish and maintain relationships with NHOs separate from consultations related to specific actions” (DoDI 4710.03, Enclosure 3, 1.(c)). The U.S. Army Hawai‘i Covenant with Native Hawaiians specifically states that the U.S. Army Hawai‘i is “committed to: Providing proactive dialog with Native Hawaiians to ensure the meaningful exchange of information and to enable sound, informed decisions by the Army that respects the legacy of the Native people of Hawai‘i while meeting the mission and goals of the Army.”

Laws, Implementing Regulations, and other guidance

- Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C §3002 (3)(c), 43 CFR §10.3
- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- Archaeological Resources Protection Act (ARPA) (16 U.S.C. §470aa-470mm)
- American Indian Religious Freedom Act (AIRFA) (42 U.S.C. §1996)
- DoD Instruction 4710.03: Consultation with Native Hawaiian Organizations (NHOs)
- U.S. Army Hawai‘i Covenant with Native Hawaiians (<https://www.garrison.Hawai‘i.army.mil/hawaiiancovenant/NativeHawaiianCovenant.pdf>)

Important Concepts

Consultations are effective when established as on-going relationships (DoD Instruction 4710.03).

Native Hawaiians and NHOs have not been granted recognition as governments by the United States. However, Congress has formally provided the right of Native Hawaiians to be consulted on decisions affecting cultural resources in a number of Federal statutes, including the Native American Graves Protection and Repatriation Act (NAGPRA) and the National Historic Preservation Act (NHPA). Consultation with Native Hawaiians and NHOs is a mandate under these two statutes.

Confidentiality

The NHPA and the ARPA contain provisions to protect culturally sensitive information that may be shared during consultations from general public disclosure. Federal requirements under the Freedom of Information Act (FOIA) (5 USC §552) may require the Army to make available consultation documents upon request. USAG-Pōhakuloa will protect culturally sensitive information from public disclosure as requested by the disclosing NHO, to the extent consistent with other legal obligations.

Timing and Process

It is important to develop a consultation schedule that affords NHOs sufficient opportunity to review information and documentation provided by USAG-Pōhakuloa. Decision-making authority may not be vested in one individual, and time may be needed in order to reach consensus on a particular issue.

Consideration should extend to distance and cost of travel as well as site visits. The schedule for consultation should be developed mutually by the Army and Native Hawaiians, taking into consideration a variety of issues including: (1) the complexity of the consultation issues, (2) Army and NHOs schedule and fiscal constraints, (3) Army and NHOs standard operating procedures and protocols, and (4) statutory requirements. The consultation schedule must also fit within the overall project timetable, including fiscal, mission, and other legal constraints.

5.8. SOP 8: Archaeological Collections Curation and Management

Introduction

In accordance with 36 CFR §79, federal agencies are mandated to preserve collections of historic and prehistoric material and associated records recovered under the authority of the Antiquities Act (54 USC §320301), the Archaeological and Historic Preservation Act (54 USC §321501), Section 110 of NHPA (54 USC §300101), or ARPA (16 USC §470aa).

Laws, Implementing Regulations, Guidance, and policy

- Curation of Federally Owned and Administered Archeological Collections (36 CFR §79)
- Federal Property and Administrative Services Act (40 U.S.C. §484), and its implementing regulations (41 CFR §101)
- Guidelines for the Field collection of Archaeological Materials and Standard Operating Procedures for Curation of Department of Defense Archaeological Collections (Griset and Kodack 1999)
- U.S. Army Garrison in Hawai'i Archaeological Collections Care Management Plan (ACOMP)

Important Concepts

The U.S. Army Garrison, Hawai'i has a curation facility at Schofield Barracks and USAG-Pōhakuloa maintains a small curation facility at PTA. These facilities provide long-term care and management of the items accessioned into the collections and of the associated records. See Appendix B for *Cultural Resources Materials Remains and Associated Records Curation Standards*.

Collections Curation and Management Procedures

Artifact curation facilities operate in compliance with all applicable Federal regulations, as well as all corresponding Army regulations and guidelines.

1. In accordance with 36 CFR §79, collections and associated records are available for scientific, educational, and religious uses, subject to such terms and conditions as are necessary to protect and preserve the condition, research potential, religious or sacred importance, and uniqueness of the collection. To gain access to the collections, all potential users must submit a request to the Cultural Resources Section. Any resulting exhibits and/or publications shall acknowledge USAG-Pōhakuloa, and the U.S. Army as the owner and administrator of the collections. Any resulting publications including exhibition supplementary materials shall be coordinated through the Public Affairs Office and copies of any publications, reports, or other materials provided to the USAG-Pōhakuloa CRM. All internal displays and outgoing loans of materials require execution of written loan agreements, which include written authorization of the CRM.
2. Maintenance of the storage facility, the collection, and the associated information is part of the Cultural Resources Section responsibility. Each artifact is provided with sufficient space, storage furnishings, temperature, humidity, and light levels to maximize object stability over time. Regularly scheduled monitoring of environmental controls, cleaning, and spot inventories enable the CRM to comply with 36 CFR §79.

5.9. SOP 9: Maintenance Procedures for Historic Buildings and Structures

Introduction

Many different types and levels of undertakings can affect architectural character and appearance of historic buildings, structures and objects (for brevity referred to in this SOP as only “historic building”), from replacement of deteriorated architectural features to the rehabilitation and adaptive reuse of an entire building. Changes that are not done in a sympathetic manner can negatively impact, not only the historic building itself, but surrounding historic buildings or districts as well. This SOP provides uniform guidance for planning facilities maintenance, development, and alterations projects in or adjacent to eligible historic buildings and/or archaeological sites. These procedures may be initiated by DPW or through work requests and contracts. If NHPA Section 106 compliance is required, the CRM is involved to review the project(s) in accordance with NHPA Section 106 (see ICRMP SOP 1) and provide input on project alternatives and/or mitigation options when necessary.

Laws, Implementing Regulations, and guidance

- The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (see 36 CFR §68)
- National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. 306108) and Section 106 implementing regulations (36 CFR §800)
- AR 200-1: Environmental Protection and Enhancement

Important concepts

To aid Federal agencies, the National Park Service developed The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995). The Secretary of the Interior’s Standards are general in nature, but address issues as diverse as materials, architectural features, interiors, setting (district/neighborhood), and special considerations, such as additions, energy conservation, handicapped accessibility, and fire/life safety.

The Secretary of the Interior’s Standards (36 CFR §68) are comprised of four distinct but interrelated approaches to the treatment of historic properties—Preservation, Rehabilitation, Restoration, and Reconstruction. **Preservation** (Section 1.4.1) focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved through time. It requires retention of the greatest amount of historic materials, form, and features. **Rehabilitation** (Section 1.4.2) acknowledges the need to alter or add to a historic property to meet continuing or changing uses and mission needs while retaining the property's historic character. **Restoration** (Section 1.4.3) is undertaken to depict a property at a particular period of time in its history. It does this by preserving materials from the period of significance and removing materials from other periods. Finally, **Reconstruction** (Section 1.4.4), recreates non-surviving portions of a property with new materials, primarily for interpretive purposes.

General Guidelines

The maintenance and repair of historic buildings requires an understanding and appreciation of the historic context of the property, knowledge of its original materials and finishes, and a program of regular maintenance that includes proper repair and preventative maintenance procedures. The improper

application of new materials in a historic building or the improper maintenance of existing historic materials can detract from the historic appearance and diminish historic integrity.

When maintaining or repairing historic buildings, consider these general guidelines:

a) Conservation of existing original and historic materials.

The integrity of a historic building depends on the survival of its original form, structural system, and historic materials. Removal or alteration of any historic elements should be avoided, and the existing materials should be preserved through proper care and maintenance. This includes protection from natural deterioration through periodic evaluation and preventive maintenance.

b) Replacement in kind.

Missing historic elements shall be replaced in kind, and damaged or altered historic elements shall be repaired in kind. This includes doors, windows, screens, canec panels, and railings. The original state of missing, damaged, or altered elements and materials can usually be determined from original drawings and historical photographs, and logical conclusions drawn from the existence of similar structures from the same era.

c) Removal of non-historic additions or elements.

Non-historic additions or elements reduce the historic integrity of the building/structure. These include shed and roof additions; the installation of jalousie windows in place of screens, lattice, casement, or double-hung windows; and the introduction of non-compatible elements. While it is recognized that modern equipment such as kitchen appliances, bathroom fixtures, lighting, etc. are necessary for human comfort and productivity, these elements must be selected so that their style, color, and shape do not detract from the historical nature of the building. Any existing equipment that is not compatible with a historic building should be removed and replaced with historically compatible equipment. When non-conforming doors, windows, railings, and other exterior architectural features reach the end of their useful life, they should be replaced with historically accurate or compatible elements.

6. IMPLEMENTING THE ICRMP

DoDI 4715.16 requires that the ICRMP “be thoroughly integrated with other installation plans, including but not limited to the installation master plan, the facilities maintenance plan, training and range area management plans, natural resources management plans, mobilization and deployment plans, and information management systems.”

The CRM plays a primary role in implementation of this ICRMP. In fulfillment of this role, the CRM coordinates compliance with historic preservation laws and Army regulations on behalf of the Garrison Commander. The CRM also coordinates with users, interested parties, and the public to ensure compliance with NHPA, NAGPRA, and ARPA, among other laws. In addition, the CRM coordinates consultation with interested parties to address management concerns that affect the ability of USAG-Pōhakuloa to comply with historic preservation laws and regulations.

Implementing the ICRMP promotes:

- Informed decisions regarding cultural resources by USAG-Pōhakuloa personnel in many programs;
- More effective and efficient management of cultural resources;
- Compliance with public laws, regulations, and other binding commitments;
- Support of the military mission; and
- Consistency in application of cultural resources management principles.

6.1. Cultural Resources Implementation Objectives

The Cultural Resources Implementation objectives include all of the tasks required to plan, organize, and implement the Cultural Resources Management program at USAG-Pōhakuloa. Included in this list are identified data gaps. Implementation objectives for the Cultural Resources Section include the following:

1. Improve coordination in compliance review of undertakings with emphasis on timely and effective coordination between proponents and the CRM. Encourage use of DPW-wide GIS for more effective and reliable exchange of planning information among programs.
 - USAG-Pōhakuloa needs to ensure accurate inventory records regarding cultural resources to accommodate quick and accurate communications with project planners and proponents, Department of the Army and DoD, and SHPD. Efforts in recent years to validate the information regarding identified sites have improved the USAG-Pōhakuloa inventory.
2. Complete reasonable and good faith archaeological and cultural resources surveys of the training areas as needed to support training and other projects and missions.
 - To date, approximately 20% of the PTA High Hazard Impact Area has been surveyed for cultural resources, and approximately 50% of the area outside the Impact Area has been surveyed, leaving 61,892 acres to be surveyed at PTA.
3. Compile and validate cultural resources spatial data in SDSFIE-compliant GIS application.
 - Older archaeological survey reports do not provide the same level of documentation as more recent reports. The re-organization of existing inventory information and validation of information consistent with the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) is a priority need for the program, and is in progress.
4. With support from USAG-HI, complete the evaluation of buildings and structures 50 years of age or older and update the NRHP Historic Status code in GFEBs and RPLANS.

- As of December 2016, there were a total of 248 buildings and structures over 50 years old in the RPLANS database. Of these, 150 buildings and structures still required evaluation to determine National Register eligibility for update in GFEBS and RPLANS.
5. Compile and validate NRHP Historic Status codes for existing RPLANS listed assets
 6. Develop Programmatic Agreements with SHPD for routine training activities in training areas.
 - Programmatic Agreements under NHPA can provide a customized section 106 compliance process for routine activities. A Programmatic Agreement for considering effects and treatment of historic buildings and structures at KMC could reduce the paperwork between USAG-Pōhakuloa, USAG-HI, and external agencies, but still provide appropriate preservation outcomes for the historic properties.
 7. Provide information about the USAG-Pōhakuloa Cultural Resources Section to the PAO for inclusion on publically available websites. Website(s) should include information about cultural resources, the program, and policies, as well as current updates on major projects under review and information supporting consultations.
 8. Maintain an active public outreach program, especially serving military personnel, through brochures, trifold, posters, access to historic properties, articles in Hawaii Army Weekly and Environmental Bulletin, and outreach activities involving other state agencies and private organizations, schools, and the Native Hawaiian community.
 9. Pro-actively consult with Native Hawaiian Organizations and other interested parties in accordance with Department of Defense and Department of the Army guidance.
 - The Army controls more lands than any other military department in Hawai'i, encompassing a much greater diversity of circumstances, cultural resources, and cultural resources issues. Consultations with NHOs require sustained on-going attention and relationship building. USAG-Pōhakuloa will have many separate projects at different stages of consultation at all times and may receive conflicting opinions and advice from different NHOs. Adequate and effective consultations with NHOs are of crucial importance to successful support of the mission at USAG-Pōhakuloa.
 10. Promote development of a Comprehensive Agreements under NAGPRA
 - Plans of Action or Comprehensive Agreements under NAGPRA could bring consistency and order into future occurrences of both inadvertent discoveries or disturbances of *iwi kupuna* during planned activities.
 11. Curation of archaeological collections and records, and orderly control of the technical libraries and associated records needed to support the CRM program (see Appendix B for curation standards).
 - Upgrades to the PTA curation facility will ensure the facility meets the requirements of 36 CFR §79 and the *Guidelines for the Field Collection of Archaeological Materials and Standard Operating Procedures for Curation of Department of Defense Archaeological Collections* (Griset and Kodack 1999), which includes adequate fire detection and suppression, security protection, environmental controls, and integrated pest management.
 12. Create and maintain a records management system for historic properties, Section 106 files, and contractual documents identified on Garrison controlled lands.
 13. Fully integrate ICRMP actions into INRMP, Master Planning, and USARHAW TSS range plans.

6.2. Reporting

USAG-Pōhakuloa is responsible for submitting reports for funding requirements, funding work plans, and environmental quality status, among others.

Recent emphases in real property accounting standards within DoD have resulted in an increased emphasis on documenting SHPD concurrence with respect to eligibility evaluations to determine whether a particular property is or is not eligible for the NRHP. Eligibility establishes particular standards of care and responsibility for the Garrison, the applicability of which need to be reflected in the real property inventory records of the Garrison. Should there be a determination that a property is NOT eligible for the NRHP, the non-applicability of those standards to the specific property also needs to be supported with written documentation. An agency determination without written concurrence from the SHPD is not sufficient for the accounting standard, especially for buildings, structures, and objects managed by the Garrison. Requests for SHPD concurrence as to eligibility will be a significant part of the correspondence and interaction between the Garrison and the SHPD, whether or not the subject properties are at risk of being affected by a particular project or undertaking.

6.3. Cooperative Agreements

AR 200-1 directs that, where applicable, an installation should enter into Cooperative Agreements (CAs) with state and federal conservation agencies for the preservation and stewardship of cultural resources in accordance with the following authorities:

- (1) Economy Act, 31 USC. 1535, authorizes the Army to issue orders to other federal agencies to provide goods or services, so long as the order is in the best interests of the government, is cheaper or more convenient than procurement under contract, and does not conflict with another agency's authority.
- (2) Title 10 USC. Section 2684 authorizes the Army to enter into CAs with states, local governments, or other entities for the preservation, maintenance, and improvement of cultural resources on military installations and for the conduct of research regarding cultural resources on installations. (National Defense Authorization Act for Fiscal Year 1997, Pub. L. No. 104-201, 110 Stat. 2422, Section 2862 (1996), adding section 2684 to Chapter 159 of Title 10 of the United States Code.).
- (3) Agreements (e.g., MOUs and CAs) have been established between the DoD, other federal agencies and non-profit organizations, which provide arrangements for DoD components to enter into implementing agreements with such agencies and organizations for the attainment of mutual conservation objectives. Garrison Commanders, utilizing relevant and appropriate statutory authority, as set forth above, may develop and sign implementing Interagency Agreements or CAs with said entities. All Interagency Agreements and CAs entered into in accordance with the provisions of this section must receive technical and legal review prior to the Garrison Commander's signature.

6.4. NHPA Section 106 Agreements

Programmatic Agreements (PAs), Memoranda of Agreement (MOAs), and Advisory Council on Historic Preservation Program Comments executed pursuant to Section 106 of the NHPA and its implementing regulations at 36 CFR §800 are legally binding agreements that set forth how the Army will satisfy its responsibilities in the event of an Army undertaking that will affect specific historic properties and property types. The following Agreements and Program Comments are applicable for USAG-Pōhakuloa:

Agreement	Scope	Initial Date	Expiration Date	Notes
Nationwide Agreements and Program Comments applicable to USAG-Pōhakuloa				
Program Comment for Cold War Era Unaccompanied Personnel Housing		2007	none	
Program Comment for Cold War Era Ammunition Storage Facilities		2007	none	
Program Comment for Rehabilitation Treatment Measures		2008	1 Nov 2018 unless extended	
Programmatic Agreements applicable to USAG-Pōhakuloa				
Programmatic Agreement for the Development and Construction of the Infantry Platoon Battle Course at Pōhakuloa Training Area	Stipulates actions in design, pre-construction, and construction phases of the project, and annual reporting.	6/26/2013		
Amendment to IPBC PA	Restructures some deadlines for actions.	2015	2021	
Programmatic Agreement for Army Transformation of the 2 nd Brigade, 25 th Infantry Division (Light) to a Stryker Brigade Combat Team (SBCT)	Covers 28 individual projects on PTA and O'ahu.	2004	2010	
Amendment to SBCT PA	extends date	2010	12/31/2015	
2 nd Amendment to SBCT PA	extends date	2015	21/31/2017	
NAGPRA Agreements				
Native American Graves Protection and repatriation Act Plan of Action For the Disposition And Treatment of Human Remains At Site T-092812-02, Ka'ohe Ahupua'a, Hamakua District, Pohakuloa Training Area, Hawai'i Island, Hawai'i		24-Sep-2015		

Other Agreements				
Marine use of MV22 and H-1 in Hawai'i		July 2012	2022 unless completed earlier	Army is Invited Signatory. Marines to use some Army Landing Zones. Will survey some for extra area.
KMC special use agreement		1996	31-Aug-2021	National Park Service retains ownership of KMC

6.5. Organizational Enhancement, Roles and Responsibilities

Installation Integration

The primary users of the ICRMP at the activity level are USARHAW and DPW. However, there are numerous project proponents in the Major Support Commands (MSCs) that must be made aware of the compliance requirements associated with their activities and their potential impacts on cultural resources. These include Brigade Commanders, Battalion Commanders, and the Provost Marshal (PM). The Command level, USAG-Pōhakuloa, also has a vested interest in the ICRMP since the Garrison Commander is responsible agency official for the ICRMP. Special staff of the Command level, such as the Public Affairs Office (PAO) and the Office of the Staff Judge Advocate (OSJA) often play a lead role as liaison with interested parties from the surrounding community and outside agencies.

Many offices that require cultural resources integration fall under DPW, who is responsible for managing roads, buildings, and natural and cultural resources at USAG-P. DPW maintains and manages land to conserve biodiversity and ensure that the installation complies with federal and state environmental laws and regulations. DPW is responsible for implementing both ICRMPs and Integrated Natural Resources Management Plans (INRMPs).

Jointly with USAG-HI, USAG-Pōhakuloa DPW requires that all major activities (at all levels and scales, such as training exercises, construction and demolition, and other actions) that could potentially impact the environment be assessed prior to commencement of the action. The objectives for program managers to determine and rate the impacts within their programs, both positive and negative, are provided by various annual monitoring and reporting mechanisms. The primary concern is to ensure that the Cultural Resources Section supports the USAG-Pōhakuloa mission, vision, and goals.

Command Support

AR 200-1 defines the role of the Garrison Commander (GC), the responsibilities of the Cultural Resources Management program, and the requirement from DoDI 4715.16 to complete an ICRMP. Together, these elements create a framework for managing cultural resources at the installation level and support the Army in addressing its need for a comprehensive cultural resources management program. Therefore, the effective management of cultural resources, as exemplified by the development and Garrison, wide acceptance of this ICRMP, follows from federal laws, Army regulations, and from Federal Standards and Guidelines for federal historic preservation programs.

Cultural Resource Organization

The CRM is delegated cultural resources management responsibility by the USAG-Pōhakuloa Commander to provide day-to-day management of cultural resources, help ensure that all installation activities are in compliance with applicable cultural resource requirements, serve as a liaison between all persons involved with the implementation of the ICRMP, write the ICRMP or develop its Statement of Work, and implement the ICRMP's Standard Operating Procedures in support of the overarching DPW EMS Program.

USAG-Pōhakuloa Cultural Resources staff is responsible for Cultural Resources Management operations to include Section 106 consultation and development of agreement documents (where applicable); NAGPRA consultation; ARPA implementation; development, submittal, and implementation of budgets; maintenance of a GIS database for Hawai'i Island Army facilities; and maintenance of an on-site curation facility and required data. Under legal requirements of NHPA, NAGPRA, and ARPA, among others, the CRM

must review planned projects for potential adverse impacts on cultural resources. In so doing, the CRM routinely furnishes information and professional advice to DPW staff, tenants, and users so that planned activities may avoid adverse effects to cultural resources.

USAG-Pōhakuloa Cultural Resources staff will compile all required information for data calls and other information requests from higher headquarters. USAG-HI will compile required data for Hawai'i to forward to higher headquarters. USAG-HI will provide support for consultations, maintain a joint PastPerfect database to track curation assets, and will provide additional staff to USAG-Pōhakuloa in completing critical actions, if needed (OPORD 48-10 2010).

Staffing

The USAG-Pōhakuloa CRM fulfills a range of responsibilities assigned in AR 200-1, and the ICRMP supports the execution of these responsibilities. The CRM is the Army civilian employee assigned by USAG-Pōhakuloa Garrison Commander to provide oversight and direction to the Cultural Resources Section staffed by professionally qualified personnel, who conduct project review, public education, and inventory information management, among other tasks. Full implementation of this ICRMP requires full-time cultural resources positions with technical assistance provided by partners, cooperators, and contractors.

In order to meet USAG-Pōhakuloa's regulatory responsibilities, the CRM will ensure consideration of cultural resources during the planning and implementation of the installation's programs, undertakings, and actions that have the potential to affect historic properties (NHPA Section 106). USAG-Pōhakuloa's Cultural Resources Section also supports the installation's responsibilities pursuant to NHPA, ARPA, NAGPRA, and a suite of other cultural resources statutes, regulations, and guidelines. The CRM coordinates with stakeholders across the installation to assist the GC in meeting these regulatory responsibilities.

Qualifications

Pursuant to Section 112 of NHPA, agency personnel or contractors responsible for historic properties analysis must meet qualifications standards established by the Office of Personnel Management in consultation with the Secretary of the Interior. These are *The Secretary of the Interior's Professional Qualification Standards*, defined in 36 CFR §61. Historic properties management activities discussed in this ICRMP must be conducted and/or supervised by cultural resources management professionals with the minimum qualifications that meet the standards for the appropriate discipline.

Training

Interdisciplinary training is essential for DoD Cultural Resources Managers and staff to address practical job disciplines, statutory compliance requirements, applicable regulations, and current professional qualification standards. It is important for the Cultural Resources Management staff to be knowledgeable in the issues affecting cultural resources and how these issues may affect USAG-Pōhakuloa's mission.

Cultural resources management training is supported for both Army and Cooperative Agreement staff to include Naval Civil Engineer Corps Officers School (CECOS) courses on various aspects of cultural resources management, IMCOM funded cultural resources sessions, and occasional other training opportunities.

Current training requirements may include the following:

- 24 hours annually for CRM staff to maintain and increase skills and capabilities.
- The Department of Army police force within the Garrison shall include officers trained in the requirements and techniques needed for successful response and investigation of all applicable federal and State laws and regulations as part of the College-Level Exam Program (CLEP) for all law enforcement personnel assigned to support environmental programs (see DoDI 5525.17). These include, but are not limited to, training with respect to enforcement of ARPA violations.
- The Criminal Investigation Division (CID) shall include investigators trained in the requirements and techniques needed for successful documentation and prosecution of violations of all applicable federal and State laws and regulations. These include, but are not limited to, training with respect to enforcement of ARPA violations.
- The Office of the Staff Judge Advocate (OSJA) shall ensure that attorneys providing opinions and advice on cultural resources issues have training and experience with respect to cultural resources legal topics. 40 hours annual training is specified for OSJA attorneys in CR related requirements as part of CLEP for the attorneys assigned to support environmental programs.

Public Involvement, Outreach, and Educational Materials

Outreach is another foundational component of cultural resources implementation. The Cultural Resources Section integrates outreach efforts through the conservation webpage, conservation newsletter, and other outreach events. Likewise, Federal and Army regulations require that interested members of the public have an opportunity to be involved in consultations and in the decision-making processes concerning historic preservation and environmental management efforts.

The purpose of NHPA envisions public benefits from the continuing presence of historic properties in communities. In many instances, that intended benefit would entail an opportunity to see and appreciate historic properties in their settings. This opportunity is not always available on military installations due to security considerations, safety considerations within training ranges, or schedules for required training activities. Thus, opportunities for the public to learn the histories associated with historic properties would provide some public benefit, as intended by the NHPA. One important public constituency for information regarding historic and cultural places within the Garrison is the military and military dependents currently assigned to Hawai'i. Many of USAG-Pōhakuloa's cultural resources may serve to instill knowledge and pride in the military history and traditions connected to properties in Hawai'i for those who serve here. Cultural resources can help foster a greater understanding and appreciation of the unique history and traditions of the larger community.

USAG-Pōhakuloa shares information with the public regarding the cultural resources program and the cultural resources under its stewardship as required. USAG-Pōhakuloa engages the public as a partner, as well as the intended beneficiary of the program. Public input on the general character of the program and public views regarding the known resources helps inform the Cultural Resources Section in its management goals and objectives. The public may offer valuable insights as to the ways in which various cultural resources convey or embody value. The public may also offer ideas regarding appropriate means through which USAG-Pōhakuloa may balance care for the resources with the demands of mission support.

Public Involvement Directives

A number of legal authorities devote specific direction to the inclusion of interested members of the public in the planning of projects, actions, or undertakings that might affect cultural resources. According to DoDI 4715.16, it is DoD policy to consult in good faith with internal and external stakeholders and promote partnerships to manage and maintain cultural resources, and provide for public access to cultural

resources, as appropriate. Both NEPA and NHPA specifically direct federal agencies to begin assessing cultural resources issues as early as possible in the process of planning actions or undertakings. Project-specific consultations arise as part of NHPA Section 106, in consideration of applications for an ARPA permit, from projects or actions that may affect Cultural Items as defined in NAGPRA, from inadvertent discoveries of archaeological resources or cultural items, and from actions that could affect access or use of sacred places. ARPA likewise requires a program for public awareness of the significance of archaeological resources and the need to protect them (16 USC 470 §10(c)).

Participation in Defining Program Alternatives and Agreements

Many of the cultural resources laws and regulations allow the basic compliance procedures to be customized or streamlined through agreements of broader application than the project-by-project generic procedures. More general and customized procedures can be established to provide orderly responses to situations known to recur, or to properly coordinate a particularly large or complex undertaking. The NHPA implementing regulations offer a number of “program alternatives” (36 CFR 800.14) to federal agencies. NAGPRA encourages adoption of Comprehensive Agreements that can govern responses to recurring situations. In order to establish these agreements for tailored procedures, there must be open-ended consultations with the parties signing the agreements, and with other interested parties and individuals.

Ongoing Relationships

DoD policy (DoDI 4710.02) establishes that consultation with Native Hawaiian Organizations should take place in the context of an on-going relationship, and not be based on project-by-project consultations only. The directives from DoD view maintaining an active, ongoing relationship with NHOs as crucial to producing outcomes that better support military mission needs while also meeting the stewardship responsibilities in cultural resources requirements.

USAG-Pōhakuloa should maintain consultative relationships continuously rather than as a project specific duty. This is a best management practice and consistent with the DoD policy and guidance. There should be periodic effort to maintain communications and exchange of information with those whose interests are in traditional Hawaiian sites, historic architecture, military history in Hawai‘i, Cold War properties, or any other interests in the cultural resources managed by the Garrison.

6.6. Financial Management and Funding

Another significant component of USAG-Pōhakuloa Cultural Resources Management program is financial management. Financial management consists of funding, budgeting, and contracting. These three components all are extremely important to USAG-Pōhakuloa's ability to implement this plan. This section of the plan assists in the development of funding requests and projections for many aspects of cultural resources program implementation.

IMCOM policy for use of environmental funds for cultural resources activities is issued in annual funding guidance. The funding guidance specifies projects and activities that are not eligible for environmental funding. Projects and activities that are not eligible for environmental funding include repair, maintenance, and rehabilitation of historic properties (including National Register-eligible and listed buildings, structures, sites, objects, landscapes, districts, and cemeteries). Even in cases where repair, maintenance, and rehabilitation activities are stipulated and required in NHPA Section 106 PAs or MOAs, such activities remain not eligible for environmental funds and must be supported through other fiscal sources.

Tenant organizations and other proponents are responsible for securing funding for their environmental requirements through their major commands unless other agreements have been made in their MOU/ISSA with the host installation (AR 200-1, 15-1). Tenants have a joint responsibility (along with the host installation), for ensuring that environmental reporting requirements are met.

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8. APPENDICES

8.1. APPENDIX A: LIST OF ACRONYMS

25 th ID	25th Infantry Division	CEPOD	U.S. Army Corps of Engineers, Pacific Ocean Division
AAF	Army Airfield	CEQ	Council on Environmental Quality
ACCOMP	Archaeological Collections Care Management Plan	CEX	Technical Center of Expertise (U.S. Army Corps of Engineers)
ACHP	Advisory Council on Historic Preservation	CERL	Construction Engineering Research Laboratory
ACSIM	Assistant Chief of Staff for Installation Management	CFR	Code of Federal Regulation
A.D.	anno Domini	CFSC	Community and Family Support Center
ADP	Area Development Plan	CID	Criminal Investigation Division
ADEP	Area Development Execution Plan	CINCPOA	Commander-in-Chief, Pacific Ocean Areas
AE	Adverse Effect	CLEP	College-Level Exam Program
AFB	Air Force Base	CLR	Cultural Landscape Report
AHPA	Archaeological and Historic Preservation Act of 1974	CMTC	Citizens Military Training Camp
AIRFA	American Indian Religious Freedom Act	COE	Corps of Engineers
AMC	Army Medical Center	CONARC	Continental Army Command
AMR	Āliamanu Military Reservation	CRM	Cultural Resources Manager/Management
AOR	Area of Responsibility	CS	Combat Support
APE	Area of Potential Effect	CSA	Chief of Staff, Army
AR	Army Regulation	CSS	Combat Service Support
ARPA	Archaeological Resources Protection Act of 1979	CX	Categorical Exclusion
ARTEP	Army Training and Evaluation Program	CZMA	Coastal Zone Management Act of 1972
asl	above sea level	DA	Department of the Army
ATV	All-Terrain Vehicle	DCA	Directorate of Community Activities
AVN BDE	Aviation Brigade	DCO	Deputy Commanding Officer
AWCF	Army Working Capital Fund	DEH	Directorate of Engineering and Housing
AWS	Aircraft Warning System	DEIS	Draft, Environmental Impact Statement
BAAF	Bradshaw Army Airfield	DHEW	Department of Health, Education & Welfare
BAX	Battle Area Complex	DHS	Directorate of Health Services
BDE	Brigade	DISCOM	Division Support Command
BPP	Building Preservation Plan	DIVARTY	Division Artillery Group
CA	Comprehensive Agreement	DLNR	Department of Land and Natural Resources, State of Hawai'i
CACTF	Combined Arms Collective Training Facility	DMR	Dillingham Military Reservation
CALFEX	Company-Level Combined Arms Live Fire Exercise	DoD	Department of Defense
CCC	Civilian Conservation Corps	DoDI	Department of Defense Instruction
CDR	Commander	DOE	Determination of Eligibility
CECOS	Civil Engineer Corps Officers School		

DOI	Department of the Interior	HAR	Hawai'i Administrative Rules
DPTMS	Directorate of Plans, Training, Mobilization, and Security	HAVO	Hawai'i Volcanos National Park
DFMWR	Directorate of Family and Morale, Welfare, and Recreation	HBPP	Historic Building Preservation Plan
DPW	Directorate of Public Works	HDOT	Hawai'i Department of Transportation
DRM	Directorate of Resource Management	HIARNG	Hawai'i Army National Guard
DSCENGR	Deputy Chief of Staff for Engineering (USARPAC)	HIBC	Hawai'i Island Burial Council
DUSD(ES)	Deputy Under-Secretary for Defense (Environmental Security)	HLMP	Historic Landscape Management Plan
EA	Environmental Assessment	HMA	Hawai'i Motor Sports Association
EDRE	Emergency Deployment Readiness Exercise	HMR	Helemano Military Reservation
EIS	Environmental Impact Statement	HPP	Historic Preservation Plan
EMS	Environmental Management System	HQDA	Headquarters, Department of the Army
ENV	Environmental Division	HQIS	Headquarters Installation Information System
EO	Executive Order	HRS	Hawai'i Revised Statute
EPAAS	Environmental Performance Assessment and Assistance System	HAS	Historic Sites Act of 1935
ERA	Emergency Relief Act	HSR	Historic Structure Report in accordance with
EPR	Environmental Program Requirements	IAW	
EQR	Environmental Quality Report	ICAR	Installation Corrective Action Plan
ERDC	Engineer Research and Development Center	ICRMP	Integrated Cultural Resources Management Plan
FDR	Fort DeRussy Military Reservation	IMCOM	Installation Management Command
FEWR	Facilities Engineering Work Request (DA Form 4283)	IMCOM-HQ	Installation Management Command-Headquarters
FHPO	Federal Historic Preservation Officer	IMCOM-PAC	Installation Management Command-Pacific
FOIA	Freedom of Information Act	INRMP	Integrated Natural Resources Management Plan
FONSI	Finding of No Significant Impact	IPB	Installation Planning Board
FORSCOM	Forces Command	IPBC	Infantry Platoon Battle Course
FOUO	For Official Use Only	IRB	Installation Review Board
FR	Federal Register	ISSA	Inter-Service Support Agreement
FRA	Federal Records Act	ITAM	Integrated Training Area Management
FSK	Field Station Kunia	JOTC	Jungle Operations Training Center
FSMR	Fort Shafter Military Reservation	KAS	Kīpapa Ammunition Storage Site
GC	Garrison Commander	KLOA	Kawailoa Training Area
GFEBs	General Fund Enterprise Business Systems	KMA	Ke'āmuku Maneuver Area
GIS	Geographic Information Systems	KMC	Kilauea Military Camp
HABS/HAER	Historic American Buildings Survey/Historic American Engineering Record	KTA	Kahuku Training Area
		LCTA	Land Condition Trends Analysis
		LCVP	Landing Craft, Vehicles and Persons
		LDP	Landscape Development Plan
		LLC	Limited Liability Corporation

LRAM	Land Rehabilitation and Maintenance	OCONUS	Outside the Continental United States
LZ	Landing Zone	OHA	Office of Hawaiian Affairs
Lt.	Lieutenant	OIBC	O'ahu Island Burial Council
MAB	Mokulēia Army Beach	OMA	Operations and Maintenance, Army
MACOM	Major (Army) Command/Major Command	OPLAN	Operational/Operations Plan
MAR	Maintenance and Repair Program	OPORD	Operation Order
MCA	Military Construction, Army	ORLC	O'ahu Railway and Land Company
MCX	Mandatory Center of Expertise (U.S. Army Corps of Engineers)	OSJA	Office of the Staff Judge Advocate
MCRD	Marine Corps Recruit Depot	PA	Programmatic Agreement
MEDCOM	Army Medical Command	PAO	Public Affairs Office/Officer
METLs	Mission Essential Tasks	PARC	Piliā'au Army Recreation Center
MKS	Mauna Kapu Communication Station Site	PBCUA	Public Buildings Cooperative Use Act
MMR	Mākua Military Reservation	PBSB	PTA-Based Support Battalion
MOA	Memorandum of Agreement	PM	Provost Marshall
MOU	Memorandum of Understanding	PMOA	Programmatic Memorandum of Agreement
MOUT	Military Operations in Urban Terrain	POA	Plan of Action
MR	Military Reservation	POD	Pacific Ocean Division, USACE
MSCs	Major Support Commands	POM	Program Objective Memorandum
MWR	Morale, Welfare, and Recreation	PTA	Pōhakuloa Training Area
N/A	Not Applicable	PTSD	Post Traumatic Stress Disorder
NAE	No Adverse Effect	PWA	Public Works Administration
NAGPRA	Native American Graves Protection and Repatriation Act of 1990	PZ	Pickup Zone
NEPA	National Environmental Policy Act of 1969	RCS	Report to Congress
NEV	Not Evaluated	RCUH	Research Corporation of the University of Hawai'i
NHL	National Historic Landmark	RDH	Range Division-Hawai'i
NHO	Native Hawaiian Organization	REC	Record of Environmental Consideration
NHPA	National Historic Preservation Act of 1966	RFRA	Religious Freedom Restoration Act
NHPA	No Historic Properties Affected	ROA	Record of Availability
NOAA	National Oceanic and Atmospheric Administration	ROD	Record of Decision
NOI	Notice of Intent	ROI	Region of Influence
NPS	National Park Service	RPLANS	Real Property Planning and Analysis System
NR	National Register (also called the National Register of Historic Places)	RPMP	Real Property Master Plan
NREC	Contributing Element of a National Register Eligible District	RSC	Regional Support Command
NRHP	National Register of Historic Places (also called the National Register)	RTLTP	Range and Training Land Program
O&M	Operation and Maintenance	SALT	Strategic Arms Limitation Treaty
		SBCT	Stryker Brigade Combat Team
		SBER	Schofield Barracks East Range
		SBMR	Schofield Barracks Military Reservation
		SBSR	Schofield Barracks South Range
		SBWR	Schofield Barracks West Range

SDSFIE	Spatial Data Standards for Facilities, Infrastructure, and Environment
SHPD	State Historic Preservation Division, DLNR
SHPO	State Historic Preservation Office/Officer
SOI	Secretary of the Interior
SOP	Standard Operating Procedure
STARCOM	Strategic Army Communications Network
SUP	Special Use Permit
TAMC	Tripler Army Medical Center
TBD	To Be Determined
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Officer
TMC	Tripler Medical Center
TRADOC	U.S. Army Training and Doctrine Command
TSS	Training Support System
UPH	Unaccompanied Personnel Housing
U.S.	United States
USACE	U.S. Army Corps of Engineers
USACERL	U.S. Army Construction Engineering Research Laboratory
USAEC	U.S. Army Environmental Command
USAG	U.S. Army Garrison
USAG-HI	U.S. Army Garrison, Hawai'i
USARHAW	U.S. Army, Hawaii
USARPAC	U.S. Army, Pacific
USASCH	U.S. Army Support Command, Hawai'i
USC	United States Code
USCINCPAC	Headquarters, Commander in Chief, U.S. Pacific Command
USPACOM	U.S. Pacific Command
VA	Veterans Affairs
WAAF	Wheeler Army Airfield
WARC	Waianae Army Recreation Center
WPA	Works Progress Administration
WWI	World War I
WWII	World War II

8.2. APPENDIX B: USAG-HI DPW ENV Cultural Resources Material Remains and Associated Records Curation Standards, implemented by USAG-Pōhakuloa

USAG-HI DPW ENV Cultural Resources

Material Remains Curation Standards

The following standards are applicable to all material remains generated from this contract:

- I. A collection shall have an item-level inventory of all material remains.
 - a) The inventory should be in both hard copy and electronic form.
 - b) An explanation of the cataloging system must accompany the inventory.
 - c) An inventory of any specimens or samples discarded in the lab shall be submitted as a separate file, along with the reason(s) for discard.
- II. Artifacts and samples must be appropriately cataloged and secured according to state and federal standards. Artifacts, with the exception of those needing specialized analysis, shall be cleaned.
- III. Artifacts and other material remains shall be catalogued with their primary containers labeled to include appropriate governmental jurisdiction site numbers and provenience. Items can be grouped by material type, placed in bags with the exterior permanently labeled, and a Mylar strip or acid-free paper label containing all appropriate provenience information placed within the bag.
 - a) In most cases, artifacts and other material remains shall be stored in polyethylene, zip-lock plastic bags.
 - b) Natural fiber cloth bags are an acceptable alternative, provided they can be securely closed and labeled with the appropriate information, including provenience.
- IV. All artifacts and material remains shall be organized by sequential bag number and placed in archivally-stable storage boxes. Each box should have a specimen/object inventory enclosed, be organized by project, and be in excellent condition.
 - a) Material remains shall be housed by provenience when possible. Materials may also be submitted in the analytical categories used for analysis and reporting, following the sequential numbers within each category.
 - b) If more than one layer is to be included in the box, a tray, or similar separation must be used to prevent the crushing of material. Fragile items requiring special, archivally-stable packaging may be placed within the same box as other material, if the secondary container provides adequate protection.
 - c) The boxes should be labeled on their exterior surface with the Contractor name, contract number, project name, and site(s). It is preferred that each box have a clear invoice label holder containing the box label.
 - d) Each box shall contain an itemized inventory listing of its contents keyed to a master inventory of the collection.

USAG-HI DPW ENV Cultural Resources

Associated Records Curation Standards

The following standards are applicable to all associated records generated from this contract:

I. There shall be an inventory of all associated records in both hard copy and electronic form.

II. Field Documentation

Includes but is not limited to: field notes, site forms, sketches, field bag lists, and photo documentation.

- 1) An archivally-stable hard copy of all original field documentation is required.
 - a) Pertinent digital images, including images used in the report, must also be submitted as 4"x6" photographic prints (or digital equivalent).
- 2) An electronic copy of all field documentation stored on archival CD or DVD shall be submitted. File specifications may vary depending on task order but the following can be used as guidelines:
 - a) Photographic prints generally shall be scanned at a minimum resolution of 4,000 pixels across the longest dimension, 24-bit, TIFF format.
 - b) Electronic, born digital, images shall be submitted at minimum 3 MB, TIFF files. Alternative acceptable file types are RAW and JPEG2000.
 - c) Other records shall be scanned at a minimum of 200 PPI (pixels per inch) at original size. Preferred file format is PDF/A.
- 3) Each collection shall contain original photographs and a photograph catalog.
 - a) Photographic materials shall be organized by film type (e.g., roll film, sheet film, 35mm slides, prints, digital, etc.) and in chronological sequence.
 - b) All photographic materials shall be stored in archivally-stable containers, such as archival photo sleeves, or in consultation with the Cultural Resources Manager.
 - c) Photographic prints shall be marked on the reverse side in pencil with corresponding photo log title information or a unique inventory number keyed to a photo catalog.

III. Laboratory Documentation

Includes but is not limited to: lab metrics, lab testing reports, lab notes, applied artifact cleaning and conservation techniques, and lab discard records.

- 1) All original laboratory records and analysis reports are required.
- 2) Additionally, an electronic copy of all records, scanned at a minimum of 200 PPI, at original size, and stored on archival CD or DVD shall be submitted.
 - a) The Master Artifact/Sample Catalogue must be included.
 - b) A list of conserved objects along with a description of the techniques applied to objects during cleaning, preservation, and/or analyzing shall accompany the collection. The list shall also indicate if any objects require future conservation treatment or testing.

IV. Maps and Archival Research

All pertinent maps used and generated by this contract shall be considered part of the collection. This includes, but may not be limited to, USGS maps, regional and project area maps, site survey and excavation maps, collection grid maps, and excavation unit profiles and plans.

- 1) These pertinent maps shall be listed within the inventory of associated records.
- 2) Project location, USGS, and regional maps shall also be required to be submitted electronically in a format that shall be specified in each task order or in consultation with the Cultural Resources Manager.

The following definitions are applicable to the terms used in the curation standards:

- The term **“archival quality”** is a term used to designate materials or products that are permanent, durable, and/or chemically stable, and, therefore, can be safely used for preservation purposes.
- **“Archivally-stable”** material for records means lignin-free and acid-free. Archivally-stable boxes are lignin-free, acid-free, and buffered. Artifact bagging should be done with archive quality plastic bags, 4 millimeters in thickness. Plastics safe for archival storage include: Mylar, polypropylene, and polyethylene.

8.3. APPENDIX C: ENVIRONMENTAL ASSESSMENT and DRAFT FONSI

Environmental Assessment and
Draft Finding of No Significant Impact

**IMPLEMENTATION OF THE
U.S. ARMY GARRISON, HAWAI'I
AND
U.S. ARMY GARRISON, PŌHAKULOA
INTEGRATED CULTURAL RESOURCES MANAGEMENT PLANS**

PREPARED FOR
U.S. ARMY GARRISON, HAWAI'I

PREPARED BY
COLORADO STATE UNIVERSITY
CENTER FOR ENVIRONMENTAL MANAGEMENT OF MILITARY LANDS
(CEMML)
FORT COLLINS, CO 80523



September 2017

DRAFT FINDING OF NO SIGNIFICANT IMPACT

**IMPLEMENTATION OF
THE U.S. ARMY GARRISON, HAWAI'I
AND
U.S. ARMY GARRISON, PŌHAKULOA
INTEGRATED CULTURAL RESOURCES MANAGEMENT PLANS
2017**

INTRODUCTION

An Environmental Assessment (EA) was prepared to analyze the potential for significant environmental impacts associated with the implementation of the United States Army Garrison, Hawai'i (USAG-HI) Integrated Cultural Resources Management Plan (ICRMP) and United States Army Garrison, Pōhakuloa (USAG-Pōhakuloa) ICRMP.

The EA was prepared in accordance with, and adheres to, the National Environmental Policy Act (NEPA) processes as outlined by the Council on Environmental Quality (CEQ) guidelines 40 CFR 1500-1508, *Protection of Environment*, and 32 CFR Part 651, *Environmental Analysis of Army Actions*.

PROPOSED ACTION

The Proposed Action, implementation of the USAG-HI and USAG-Pōhakuloa ICRMPs, is the preferred alternative. The purpose of the Proposed Action is to enable USAG-HI and USAG-Pōhakuloa to support the military mission by managing cultural resources in compliance with rules and regulations and in accordance with established practices of cultural resources management. The ICRMPs include goals and objectives for addressing specific cultural resources management needs and prioritize education and coordination with the many other programs and activities that may interact with cultural resources on USAG-HI and USAG-Pōhakuloa managed lands. Cultural resources management on USAG-HI and USAG-Pōhakuloa sub-installations is currently guided by existing Army guidance documents and federal laws and regulations.

The Department of Defense (DoD), the Department of the Army, USAG-HI and USAG-Pōhakuloa are required by Department of Defense Instruction (DoDI) 4715.16, *Cultural Resources Management*, and Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*, to implement and maintain ICRMPs. An ICRMP is an instrument for compliance with the statutory management requirements of applicable statutes and regulations and provides specific procedures to comprehensively manage cultural resources while sustaining the Army's capability to successfully achieve its mission. An ICRMP is an integral part of an installation's master plan.

ALTERNATIVES ANALYZED IN THE EA

No alternatives other than the Proposed Action would satisfy the purpose and need of the proposed project as preparation and full implementation of ICRMPs are required by DoDI 4715.16 and AR 200-1. Other alternatives, including partial implementation of an ICRMP, were dismissed in favor of complying with DoD and Army regulations. Therefore, no additional alternatives except the “No Action” alternative was considered in the EA.

AGENCY AND PUBLIC PARTICIPATION

This draft Finding of No Significant Impact (FNSI) has been issued in conjunction with the EA and incorporates it by reference. These documents, along with the ICRMPs, are being made available for a 30-day comment period, during which time all comments submitted by agencies, organizations, or members of the public on the Proposed Action will be considered.

Comments can be emailed to usaghi.pao.comrel@us.army.mil or mailed to the Environmental Division, Directorate of Public Works, United States Army Garrison, Hawai'i, 947 Wright Avenue, Wheeler Army Airfield, Schofield Barracks, Hawai'i 96857-5013.

ENVIRONMENTAL ANALYSIS

Based upon the analysis contained in the EA, implementation of the Proposed Action would have no significant direct, indirect, or cumulative adverse impacts on environmental or socioeconomic resources. Impacts associated with the Proposed Action were found to be temporary and negligible in context and intensity. Implementation of the ICRMPs would provide long-term beneficial impacts to historic and cultural resources by ensuring compliance with rules and regulations in support of the military mission; providing direction and guidance for management activities; and improving the coordination process between the Cultural Resources Section and project proponents.

The legal requirements of DoDI 4715.6 and AR 200-1 mandate that Army installations develop and implement an ICRMP for use as a planning tool and as the guiding document for cultural resources management decisions. The ICRMPs articulate management procedures and long-range goals for cultural resources on USAG-HI and USAG-Pōhakuloa managed lands.

FINDING

Based on information compiled and analyzed during preparation of the EA, the USAG-HI finds that the Proposed Action to implement the USAG-HI and USAG-Pōhakuōloa ICRMPs would not result in significant impacts to either the man-made or natural environment. Therefore, an environmental impact statement is not required.

Approved:

Stephen Dawson

Stephen Dawson
Colonel, US Army Garrison, Hawaii

Commanding


10/20/17

Date

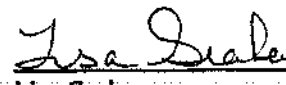
ENVIRONMENTAL ASSESSMENT
for
Implementation of the
U.S. Army Garrison, Hawai'i
and
U.S. Army Garrison, Pōhakuloa
Integrated Cultural Resources Management Plans

September 2017


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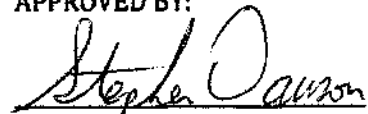

Date 10/20/17
STEPHEN E. DAWSON
Colonel, U.S. Army
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TABLE OF CONTENTS

Table of Contents	vi
List of Acronyms	viii
Chapter 1 PURPOSE AND NEED FOR THE PROPOSED ACTION	10
1.1 How to Read this Environmental Assessment.....	10
1.2 Introduction.....	10
1.3 Purpose and Need for Action	11
1.4 Scope of the Document.....	11
1.5 Agency and Public Participation.....	15
1.6 Alternatives Considered.....	15
Chapter 2 DESCRIPTION OF THE PROPOSED ACTION.....	17
2.1 Military Mission and Command Structure	17
2.1.1 <i>United States Army Garrison-Hawai‘i (USAG-HI)</i>	17
2.1.2 <i>United States Army Garrison-Pōhakuloa (USAG-Pōhakuloa)</i>	17
2.2 Cultural Resources Management.....	18
2.3 ICRMP Implementation	19
2.3.1 <i>ICRMP Goals</i>	19
2.3.2 <i>ICRMP Objectives</i>	19
2.3.3 <i>Standard Operating Procedures</i>	21
2.3.4 <i>Five-Year Management Plans</i>	21
2.3.5 <i>Staffing</i>	22
2.3.6 <i>Partners and Coordination</i>	23
Chapter 3 ALTERNATIVES CONSIDERED	24
3.1 Alternatives Considered.....	24
3.2 No Action Alternative.....	24
Chapter 4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	25
4.1 Introduction	25
4.2 Environmental Factors Not Analyzed in this EA.....	25
4.3 Environmental Factors Analyzed in this EA	25
4.3.1 <i>Military Mission and Land Use</i>	26
4.3.2 <i>Air Quality</i>	29
4.3.3 <i>Soils</i>	30
4.3.4 <i>Water Resources</i>	31
4.3.5 <i>Native Ecosystems and Biological Diversity</i>	32
4.3.6 <i>Threatened and Endangered Species</i>	33
4.3.7 <i>Invasive Species</i>	35
4.3.8 <i>Cultural Resources</i>	36
4.3.9 <i>Aesthetic and Visual Resources</i>	44
4.4 Socioeconomics, Protection of Children and Private Property, Environmental Justice...45	
4.5 Cumulative Effects.....	46
4.6 Irreversible and Irretrievable Commitment of Resources	47

Chapter 5	CONCLUSION	48
5.1	Conclusion.....	50
Chapter 6	CONSULTATION AND COORDINATION	51
6.1	Agency Consultation and Coordination.....	51
6.2	Public Involvement	51
Chapter 7	LIST OF PREPARERS.....	52
Chapter 8	REFERENCES	53

LIST OF FIGURES

FIGURE 1-1: ISLAND OF O‘AHU SUB-INSTALLATIONS.....	13
FIGURE1-2: ISLAND OF HAWAI‘I SUB-INSTALLATIONS.....	14

LIST OF TABLES

TABLE 2-1: USAG-HI PROJECTS FOR THE FIVE-YEAR PLANNING PERIOD (FY 2017-2021).....	21
TABLE 2-2: USAG-PŌHAKULOA PROJECTS FOR THE FIVE-YEAR PLANNING PERIOD (FY 2017-2021).....	22
TABLE 4-1: USAG-HI AND USAG-PŌHAKULOA SUB-INSTALLATIONS ANALYZED IN THIS EA.....	27
TABLE 5-1: SUMMARY OF ENVIRONMENTAL, SOCIAL, AND ECONOMIC IMPACTS.....	48

LIST OF ACRONYMS

AMR	Āliamanu Military Reservation
AR	Army Regulation
ARPA	Archaeological Resources Protection Act
CA	Comprehensive Agreement
CEQ	Council on Environmental Quality
CRM	Cultural Resource Manager
DoD	Department of Defense
DoDI	Department of Defense Instruction
DMR	Dillingham Military Reservation
DPW	Directorate of Public Works
DRD	Drum Road (Pūpūkea-Pa'ala'a-Uka Military Road)
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
FDR	Fort DeRussy Military Reservation
FNSI	Finding of No Significant Impact
FSK	Field Station Kunia
FSMR	Fort Shafter Military Reservation
FY	Fiscal Year
GIS	Geographic Information System
HAW	Hawai'i Army Weekly
HBMP	Hawai'i Biodiversity and Mapping Program
HPC	Historic Property Component Plans
HMR	Helemano Military Reservation
ICRMP	Integrated Cultural Resource Management Plan
IMCOM-PAC	Installation Management Command-Pacific
KAS	Kīpapa Ammunition Storage Site
KLOA	Kawailoa Training Area
KMC	Kīlauea Military Camp
KTA	Kahuku Training Area
MAB	Mokulē'ia Army Beach
MKS	Mauna Kapu Communication Station Site
MOU	Memoranda of Understanding
MMR	Mākua Military Reservation
NAGPRA	Native American Grave Protection and Repatriation Act
NEPA	National Environmental Policy Act of 1969
NEV	Not Yet Evaluated
NHL	National Historic Landmark
NHO	Native Hawaiian Organization
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
NRP	Natural Resources Program
PTA	Pōhakuloa Training Area
RPLANS	Real Property Planning and Analysis System
SBER	Schofield Barracks East Range
SBMR	Schofield Barracks Military Reservation

SBWR	Schofield Barracks West Range
SBSR	Schofield Barracks South Range
SHPD	State Historic Preservation Division
SHPO	State Historic Preservation Office
SOP	Standard Operating Procedure
TAMC	Tripler Army Medical Center
TNC	The Nature Conservancy
UPH	Unaccompanied Personal Housing
USACE	United States Army Corps of Engineers
USAEC	United States Army Environmental Command
USAG-HI	United States Army Garrison, Hawai'i
USAG-Pōhakuloa	United States Army Garrison, Pōhakuloa
USPACOM	United States Pacific Command
USARHAW	United States Army Hawai'i
USARHAW TSS	United States Army Hawai'i Training Support Systems
USARPAC	United States Army Pacific
WAAF	Wheeler Army Airfield
WAST	Waikakalaua Ammo Storage Tunnels Site
WMR	Waianae-Kai Military Reservation

CHAPTER 1 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 How to Read this Environmental Assessment

Chapter 1: Purpose and Need for the Proposed Action describes the purpose and need for U.S. Army Garrison, Hawai'i (USAG-HI) and U.S. Army Garrison, Hawai'i Pōhakuloa (USAG-Pōhakuloa) to implement Integrated Cultural Resources Management Plans (ICRMPs) for sub-installations on the islands of O'ahu and Hawai'i. This chapter also describes the scope of this environmental assessment (EA); summarizes the agency and public participation process; and provides a brief overview of the Proposed Action and the alternatives considered.

Chapter 2: Description of Proposed Action provides an in-depth discussion of the Proposed Action, which is ICRMP implementation for both USAG-HI and USAG-Pōhakuloa sub-installations.

Chapter 3: Alternatives Considered examines alternatives to the Proposed Action.

Chapter 4: Affected Environment and Environmental Consequences presents the affected environment, resources with the potential to be impacted, and analyzes any plausible environmental, cultural, social, and economic consequences that are projected to occur from implementing the preferred alternative and the No Action Alternative.

Chapter 5: Conclusions summarizes potential effects associated with the alternatives and recommends which alternative should be implemented.

Chapter 6: Agencies and Persons Consulted lists the agencies and the persons/groups that were consulted during this process.

Chapter 7: List of Preparers lists the individuals who prepared this EA.

Chapter 8: References documents the sources referenced in this analysis.

1.2 Introduction

USAG-HI and USAG-Pōhakuloa propose to implement two separate ICRMPs to integrate the entirety of Garrison Cultural Resources Sections with ongoing mission activities and to consolidate legal responsibilities into an efficient and coherent cultural resources program. The ICRMPs include goals and objectives for addressing specific cultural resources management needs and prioritize education and coordination with the many other programs and activities that may interact with cultural resources on USAG-HI and USAG-Pōhakuloa managed lands.

The Department of Defense (DoD), the Department of the Army, USAG-HI, and USAG-Pōhakuloa are required by Department of Defense Instruction (DoDI) 4715.16, *Cultural Resources Management*, and Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*, to implement and

maintain ICRMPs. An ICRMP is an instrument for compliance with the statutory management requirements of applicable statutes and regulations and provides specific compliance procedures to comprehensively manage cultural resources while sustaining the Army's capability to successfully achieve its mission. An ICRMP is an integral part of an installation's master plan.

This EA addresses the requirements of the National Environmental Policy Act (NEPA) of 1969 and adheres to the NEPA processes as outlined by the Council on Environmental Quality (CEQ) guidelines 40 CFR 1500-1508 *Protection of Environment*, and 32 CFR Part 651, *Environmental Analysis of Army Actions*. This EA informs decision-makers and the public of the possible environmental consequences of following the Proposed Action and the "no action" alternative of maintaining the status quo by evaluating the direct and indirect environmental and socioeconomic impacts of each alternative. This EA also addresses the potential for cumulative effects from the action when added to past and reasonably foreseeable future impacts.

1.3 Purpose and Need for Action

The purpose of the Proposed Action is to ensure that USAG-HI and USAG-Pōhakuloa make informed decisions regarding cultural resources, in compliance with rules and regulations, supportive of the military mission, and in accordance with established practices of cultural resources management. Adopting and implementing both USAG-HI and USAG-Pōhakuloa ICRMPs will provide comprehensive guidance for the identification, protection, preservation, restoration, and enhancement of cultural resources on Garrison-managed lands. ICRMPs are needed to ensure successful stewardship of cultural resources and to maintain compliance with DoDI 4715.16 and AR 200-1. ICRMPs ensure consistency in application by consolidating management principles included in over 40 separate statutes, regulations, and other binding guidance that dictate the responsibilities for managing cultural resources on military lands. Implementation of the Proposed Action would fulfill USAG-HI and USAG-Pōhakuloa requirements to maintain mission readiness and will improve coordination between management units at 19 sub-installations managed by USAG-HI on the island of O'ahu and three sub-installations managed by USAG-Pōhakuloa on the island of Hawai'i.

Cultural resources management on USAG-HI and USAG-Pōhakuloa sub-installations is currently guided by existing Army guidance documents and federal laws and regulations. Programmatic agreements and memorandums of agreement are enacted in accordance with regulations.

1.4 Scope of the Document

This EA analyzes the potential environmental and socioeconomic impacts associated with the No Action Alternative of continuing existing management direction and the potential impacts of the preferred alternative: implementation of both the USAG-HI and USAG-Pōhakuloa ICRMPs. The ICRMPs provide guidance for the following 22 sub-installations on the islands of O'ahu and Hawai'i:

O 'ahu (USAG-HI)

Cantonments

Āliamanu Military Reservation (AMR)
Fort Shafter Military Reservation (FSMR)
Helemano Military Reservation (HMR)
Tripler Army Medical Center (TAMC)
Wheeler Army Airfield (WAAF)

Training Areas

Dillingham Military Reservation (DMR)
Kahuku Training Area (KTA)
Kawailoa Training Area (KLOA)
Mākua Military Reservation (MMR)
Schofield Barracks Military Reservation (SBMR)

Recreational Areas

Fort DeRussy Military Reservation (FDR)
Mokulē'ia Army Beach (MAB)
Pirilā'au Army Recreation Center (PARC) located within Wai'anae Kai Military Reservation (WMR)

Other Use Areas

Kīpapa Ammunition Storage Site (KAS)
Field Station Kunia (FSK)
Mauna Kapu Communication Station Site (MKS)
Pūpūkea-Pa'ala'a-Uka Military Road (Drum Road) (DRD)
Signal Cable Trunking System
Waikakalaua Ammo Storage (WAS)

Hawai'i (USAG-Pōhakuloa)

Kawaihae Military Reservation
Kīlauea Military Camp (KMC)
Pōhakuloa Training Area (PTA)

This EA does not attempt to provide a quantitative analysis of site-specific impacts from individual projects that will be implemented during the next five-year funding period (FY2017-FY2021). Consistent with NEPA and other applicable statutes and regulations, additional analysis will be considered to analyze any impacts, prior to proceeding with specific projects or installation training activities that may affect cultural resources.

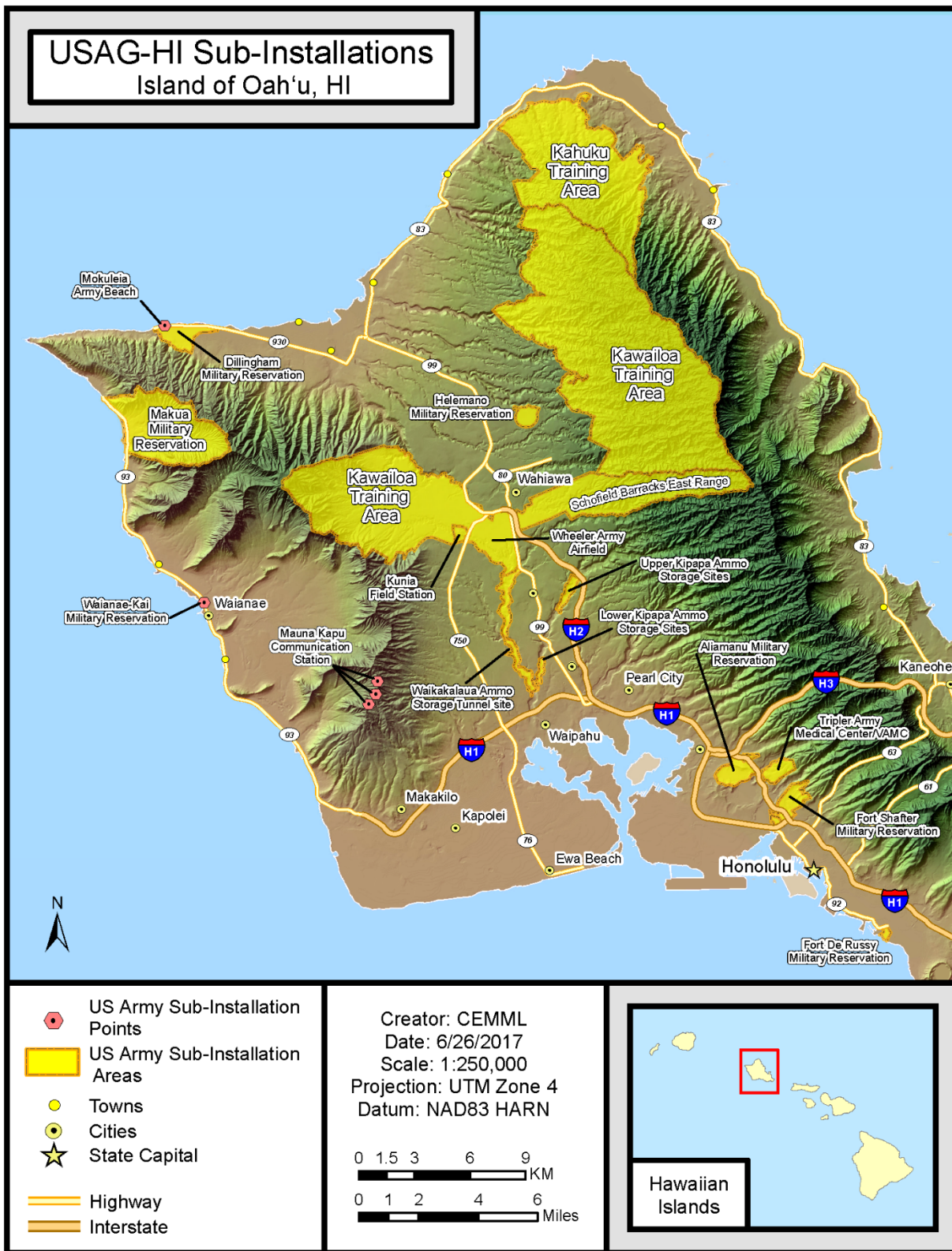


Figure 1-1: Island of O‘ahu Sub-installations

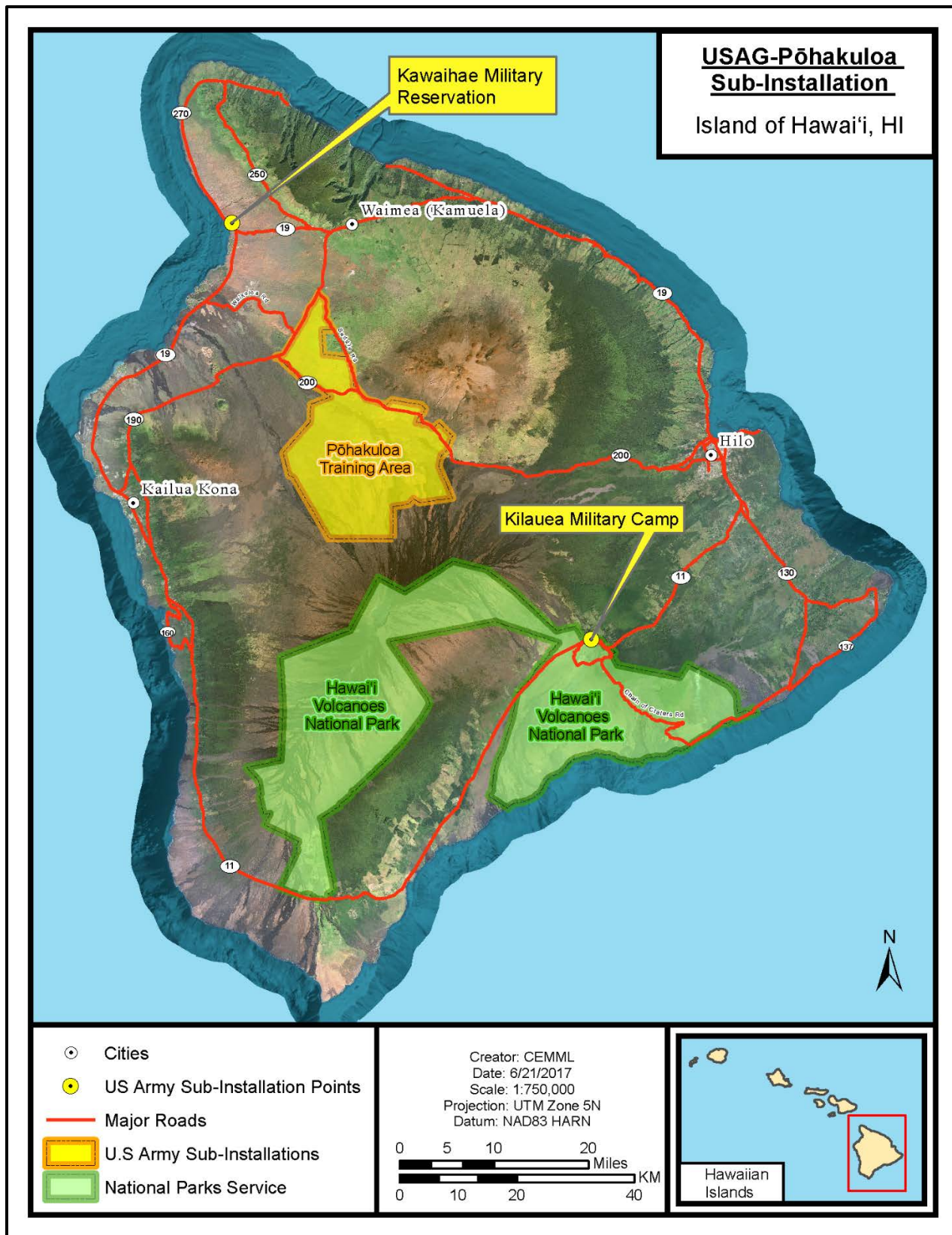


Figure1-2: Island of Hawai'i Sub-installations

1.5 Agency and Public Participation

Public participation in the NEPA process promotes informed decision-making and open communication between the public and the government. Based upon the analysis conducted in this EA, adoption and implementation of both ICRMPs, as written, would not constitute a major federal action significantly affecting the equality of the human environment. A draft Finding of No Significant Impact (FNSI) has been issued along with this EA. These documents, along with the ICRMPs, are being made available for a 30-day comment period, during which time all comments submitted by agencies, organizations, or members of the public on the Proposed Action will be considered.

Notice of public comment periods and availability of the documents are being advertised in the Star-Advertiser, Hawai'i Tribune Herald, and West Hawai'i Today. Individuals and organizations that have expressed interest in cultural resources on Army lands, including Native Hawaiian Organizations (NHOs), will receive notification via email or mail of the availability of the ICRMPs and EA and draft FNSI for public review and comment. All persons, agencies, and organizations, including Native Hawaiian groups, minorities, low income, or disadvantaged individuals, are encouraged to review and provide comments on the EA and draft FNSI. Agency and public participation is an essential and beneficial requirement of the NEPA process. The ICRMPs and the EA and draft FNSI will be sent to the Hawai'i State Historic Preservation Division (SHPD) and the Office of Hawaiian Affairs (OHA). Additionally, the ICRMPs and the EA and draft FNSI will be available on the Army's website: <https://www.garrison.hawaii.army.mil/NEPA/NEPA.htm>.

Hard copies will be available at the following public libraries:

- Island of O'ahu library locations
 - Honolulu Library
 - Waianae
 - Waialua Library
 - Mililani Library
 - Wahiawā Library

- Island of Hawai'i library locations
 - Hilo Library
 - Kona Library
 - Waimea Library

1.6 Alternatives Considered

Early in the planning process it was determined that no alternatives other than the Proposed Action would satisfy the purpose and need of the proposed project. Two alternatives, the Proposed Action and the No Action Alternative, were evaluated for their potential direct, indirect, and cumulative effects on the human environment. The Proposed Action would involve full implementation of the ICRMPs, as required by law. The No Action Alternative is the continuation of management activities currently being conducted without an ICRMP. If the No Action Alternative was to be selected, the ICRMP would not be implemented, and USAG-HI and USAG-Pōhakuloa would not be in compliance

with DoD and Army regulations. The No Action Alternative analysis within this EA serves as a baseline to compare with the environmental consequences of implementing the Proposed Action. Because implementation of the ICRMP is a regulatory requirement, USAG-HI and USAG-Pōhakuloa did not consider additional alternatives.

CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action is to implement both the USAG-HI ICRMP and USAG-Pōhakuloa ICRMP. The ICRMPs provide direction for routine activities that may impact cultural resources and also guidance for carrying out management activities outlined in the Standard Operating Procedures (SOPs) chapter of the plan. Implementing both ICRMPs promotes:

- USAG-HI and USAG-Pōhakuloa personnel with making informed decisions regarding the cultural resources under their control, resulting in more effective and efficient management of cultural resources.
- USAG-HI and USAG-Pōhakuloa compliance with cultural resource statutes and regulations and other binding commitments.
- Support of the military mission.
- Consistency in application of cultural resource management principles.

2.1 Military Mission and Command Structure

2.1.1 U.S ARMY GARRISON, HAWAI‘I (USAG-HI)

The mission for USAG-HI is “The most innovative, customer-focused garrison in the Army, ensuring our supported unit’s mission accomplishment and supported community’s sustainment.”

USAG-HI manages all Army installations in Hawai‘i. USAG-HI provides installation management service and logistical support for approximately 93,700 Soldiers, civilian personnel, military retirees and dependents, and others. Many of USAG-HI’s responsibilities are comparable to the operation of a mid-size urban area, with purview over housing, roads, utilities, schools, libraries, recreational facilities and programs, safety and emergency responses, and other amenities that support the mission and both life and work of those on the installation.

The USAG-HI Commander reports to both the Pacific Region of the Installation Management Command-Pacific (IMCOM-PAC) and to the Senior Military Commander of the United States Army, Hawai‘i (USARHAW). USAG-HI maintains oversight and support responsibilities for the subordinate, indirect garrison of USAG-Pōhakuloa, and jointly with USAG-Pōhakuloa facilitates cultural resources responsibilities of the Army at Pōhakuloa Training Area (PTA), Kawaihae Military Reservation, and Kīlauea Military Camp (KMC). While USAG-HI is responsible for basic support and management services; there are many military commands and units working within the installations. The activities and requirements of these units affect the demands facing cultural resources management within USAG-HI jurisdiction.

2.1.2 U.S. ARMY GARRISON, PŌHAKULOA (USAG-PŌHAKULOA)

The mission for USAG-Pōhakuloa is to “provide support for single service, Joint, and Combined training to afford warfighters the most realistic and flexible training environment available in the Pacific.”

The USAG-Pōhakuloa Commander has command and control authority for PTA as an indirect Garrison to USAG-HI and reports to both the U.S. Army Pacific (USARPAC) Command and IMCOM-PAC through USAG-HI Command and USARHAW. PTA is the primary tactical training area that provides the United States Pacific Command (USPACOM) Commander with joint/multinational training capabilities to support home-station training, joint training, and enables theater regional engagements. As a remote location, PTA is ideally suited for emergency deployment readiness exercises, regional Joint Reception, Staging, Onward Movement and Integration training, and multinational exercises in support of Theater Security Cooperation Programs and Shaping Operations.

USAG-HI activities support USAG-Pōhakuloa staff with technical oversight, as well as continued administrative and logistical support as USAG-Pōhakuloa grows its capabilities. USAG-Pōhakuloa also has oversight of KMC and Kawaihae Military Reservation and provides cultural resources support for both. The USAG-Pōhakuloa actively supports USAG-HI tenant activities, organizations, and units when they deploy to PTA for training. Tenants are required to notify the CRM of any potential changes to historic properties and to coordinate National Historic Preservation Act (NHPA) Section 106 processes through the USAG-Pōhakuloa Cultural Resources Section.

2.2 Cultural Resources Management

The major goal of a cultural resources program is to “develop and implement procedures to protect against encumbrances to mission by ensuring that Army installations effectively manage cultural resources” (U.S. Army 2007). The USAG-HI and USAG-Pōhakuloa Commanders ensure that USAG-HI and USAG-Pōhakuloa sub-installations meet the general cultural resources requirements assigned. As the leading authority in charge of cultural resources, the Garrison Commanders are specifically designated as the federal agency official for purposes of the NHPA (36 CFR § 800), as the Federal Land Manager for purposes of the Archaeological Resources Protection Act (ARPA) (32 CFR § 229), as the Federal Agency Official with management authority over archeological collections and associated records (36 CFR § 79), and as the Federal Agency Official for purposes of the Native American Graves Protection and Repatriation Act (NAGPRA) (43 CFR § 10).

The USAG-HI cultural resource manager (CRM) is appointed by the USAG-HI Commander. The USAG-Pōhakuloa CRM is appointed by the USAG-Pōhakuloa Commander. CRMs provide day-to-day management of cultural resources and ensure that all installation activities are in compliance with applicable cultural resources requirements, serve as liaisons between all persons involved in implementing the ICRMP, and carry out the cultural resource management activities as outlined in the SOPs.

2.3 ICRMP Implementation

2.3.1 ICRMP GOALS

Both ICRMPs provide the necessary authority to manage the cultural resources contained within all 22 sub-installations. ICRMPs are reviewed and updated every year to ensure accuracy, and revised approximately every five years as needed. The overall purpose of an ICRMP is to incorporate guidelines and consolidate procedures for cultural resources management into a single document to more efficiently fulfill management responsibilities. The USAG-HI and USAG-Pōhakuloa ICRMPs share the following goals:

- Meet USAG-HI and USAG-Pōhakuloa obligations for compliance with NHPA, NEPA, NAGPRA, ARPA and other legal requirements in an efficient and effective manner consistent with DoD standards while minimizing effects on the military mission.
- Enforce federal laws that prohibit vandalism of cultural resources on federal properties through law enforcement, monitoring, and public awareness.
- Ensure that current and planned installation programs, plans, and projects are integrated with cultural resources management initiatives.
- Identify and evaluate cultural resources eligibility for inclusion in the National Register of Historic Places (NRHP) and maintain an up-to-date inventory of historic properties.
- Avoid or minimize adverse effects on historic properties that meet eligibility criteria for inclusion in the NRHP.
- Preserve significant historic properties whenever possible and mitigate in accordance with the outcome of consultation in the long-term public interest when adverse effects cannot be avoided.
- Ensure that appropriate consultation procedures are followed at the earliest planning stage of any undertaking that may affect historic properties.
- Maintain a cultural resources program staff that meets the *Secretary of the Interior Professional Qualification Standards* (36 CFR §61).
- Maintain confidentiality regarding the nature and location of cultural resources unless the federal agency determines that it would not create a risk of harm to the sites and would further the purposes of ARPA.
- Maintain curation of archaeological collections and records, and orderly control of the technical libraries and associated records needed to support the Cultural Resources Sections pursuant to 36 CFR § 79.

2.3.2 ICRMP OBJECTIVES

The planning objectives for both ICRMPs are to improve coordination between proponents and CRMs and encourage use of the DPW GIS for more reliable exchange of planning information among programs. Compiling and maintaining the locations, extent, and important attributes of each known cultural resource will help the Cultural Resources Sections to provide the best available current data for all planners within both USAG-HI and USAG-Pōhakuloa sub-installations.

The ICRMPs provide direction for routine activities that may impact cultural resources by establishing SOPs, identifying various public consultation requirements, and providing goals that

would benefit the management of cultural resources on Garrison lands. The ICRMPs do not detail site-specific individual projects. Consistent with NEPA and other applicable statutes and regulations, additional NEPA analysis will be needed to analyze any impacts prior to proceeding with specific projects or installation training activities that may affect environmental, social, and/or economic resources.

If the preferred alternative is chosen, USAG-HI and USAG-Pōhakuloa CRMs will play a primary role in implementing the ICRMPs. The ICRMPs provide guidance for the CRMs to coordinate compliance with historic preservation laws and Army regulations on behalf of each Garrison Commander. The following objectives include all of the tasks required to plan, organize, and implement both ICRMPs:

- Complete reasonable and good faith archaeological and cultural resource inventory surveys in areas not adequately surveyed, as needed, to support training and other projects and missions.
- Conduct regular education regarding cultural resources and procedures related to them for:
 - Military personnel newly assigned to USAG-HI or USAG-Pōhakuloa.
 - Planners, project proponents, and others whose programs and actions have high potential for affecting cultural resources.
 - Members of the public who are intended to benefit from historic properties and other cultural resources.
- Improve coordination in compliance review of undertakings with emphasis on timely and effective coordination between proponents and the CRM.
- Encourage use of Directorate of Public Works (DPW)-wide Geographic Information System (GIS) for more effective and reliable exchange of planning information among programs.
- Compile and validate cultural resources spatial data in Spatial Data Standards for Facilities, Infrastructure, and Environment-compliant GIS applications.
- Compile and validate archaeological site inventory (USAG-Pōhakuloa) and Real Property Planning and Analysis System (RPLANS) data (USAG-HI).
- Complete evaluations of buildings and structures 50 years of age or older.
- Compile and validate NRHP Historic Status codes for all existing RPLANS-listed assets.
- Prepare Historic Structure Reports and/or Treatment Plans for the care and maintenance of NRHP eligible historic buildings, structures, and districts.
- Develop Programmatic Agreements with State Historic Preservation Division (SHPD) for general operations, maintenance, and development.
- Develop Programmatic Agreements with SHPD for routine training activities in training areas.
- Provide information about the USAG-HI and USAG-Pōhakuloa Cultural Resources Sections to the Public Affairs Office for inclusion in publically available websites. Website(s) should include information about cultural resources, the program, and policies, as well as current updates on major projects under review and information supporting consultations.
- Maintain an active public outreach program, especially serving military personnel, through brochures, trifolds, posters, access to historic properties, and outreach activities involving other state agencies and private organizations, schools, and the Native Hawaiian community.
- Pro-actively consult with Native Hawaiian organizations and other interested parties in accordance with DoD and Department of the Army guidance.
- Create and maintain a records management system for historic properties identified on Garrison-controlled lands, Section 106 files, and contractual documents.

- Fully integrate ICRMP actions into Integrated Natural Resources Management Plans (INRMPs), Master Planning and U.S. Army Hawai'i Training Support Systems (USARHAW TSS) range plans.

2.3.3 STANDARD OPERATING PROCEDURES

Standard Operating Procedures (SOPs) provide direction for routine activities that may have an impact on cultural resources. Each SOP identifies relevant regulations that the Garrison must follow to maintain regulatory compliance. The SOPs detailed in the ICRMPs address specific situations that are likely to occur and provides steps for the implementation and notification requirements for each event type. The following SOPs are included in both the USAG-HI and USAG-Pōhakuloa ICRMPs:

- **SOP 1:** Compliance Procedures for NHPA Section 106
- **SOP 2:** Identify and Evaluate Historic Properties
- **SOP 3:** Unanticipated Discovery of Historic Properties and Inadvertent Discovery of Human Remains and/or Cultural Items
- **SOP 4:** Emergency Situations
- **SOP 5:** Native American Grave Protection and Repatriation Act (NAGPRA): Planned activities and comprehensive agreements
- **SOP 6:** Archaeological Resources Protection Act (ARPA) of 1979 Compliance Procedures
- **SOP 7:** Native Hawaiian Consultation
- **SOP 8:** Archaeological Collections Curation and Management
- **SOP 9:** Maintenance Procedures for Historic Buildings and Structures

2.3.4 FIVE-YEAR MANAGEMENT PLANS

USAG-HI

Over the next five years (FY 2017-2021), USAG-HI expects to have undertakings that could potentially affect historic properties. These potential undertakings include routine maintenance and operations of historic buildings and ranges, construction projects, natural resources management activities, and recurring training exercises. Proponents for such undertakings include USARHAW TSS, USAG-HI and USAG-Pōhakuloa DPW, and other tenant organizations. Table 2-1 includes several such projects that USAG-HI is currently tracking that could begin within the next five years. Project planning and decision-making will involve additional environmental review to consider any potential resource impacts from the following individual projects:

Table 2-1: USAG-HI Projects for the Five-Year Planning Period (FY 2017-2021)

Sub-Installation	Proposed Project
Schofield Barracks	Construction of Company Operations Facilities and associated structures at SB 9000 Block

Sub-Installation	Proposed Project
Schofield Barracks East Range	Construction and use of training areas associated with the Jungle Operations Training Center
Wheeler Army Airfield	Adapted re-use of National Historic Landmark (NHL) Wheeler Army Airfield hangers if facility no longer meets mission standards for aviation use
Tripler Army Medical Center	Renovations of Tripler Army Medical Center
Schofield Barracks	Continue use/renovations of SB Woodies for long-term sustainability

USAG-Pōhakuloa

Over the next five years (FY 2017-2021), USAG-Pōhakuloa expects to have undertakings that could potentially affect historic properties. These potential undertakings include routine maintenance and operations of historic buildings and ranges, construction projects, natural resources management activities, and recurring training exercises. Proponents for such undertakings include USARHAW TSS, USAG-HI and USAG-Pōhakuloa DPW, and other tenant organizations. Table 2-2 includes several such projects that USAG-Pōhakuloa is tracking and that could begin within the next five years. Project planning and decision-making will involve additional environmental review to consider any potential resource impacts from the following individual projects:

Table 2-2: USAG-Pōhakuloa Projects for the Five-Year Planning Period (FY 2017-2021)

Sub-Installation	Proposed Project
Pōhakuloa Training Area	Keamuku Range Roads - Garrison MSR - Troop Construction
Pōhakuloa Training Area	Access Control Point and MP Station
Pōhakuloa Training Area	Aviation Gunnery Range
Pōhakuloa Training Area	Qualification Training Range
Pōhakuloa Training Area	Road paving projects

2.3.5 STAFFING

Full implementation of the USAG-HI and USAG-Pōhakuloa ICRMPs requires full-time cultural resources positions with technical assistance from partners, cooperators, and contractors. These

positions are already staffed; therefore, implementation of either the USAG-HI or the USAG-Pōhakuloa ICRMP will not require additional staffing.

2.3.6 PARTNERS AND COORDINATION

Department of Defense Instruction 4715.16 states “Consult in good faith with internal and external stakeholders and promote partnerships to manage and maintain cultural resources by developing and fostering positive partnerships with Federal, tribal, State, and local government agencies; professional and advocacy organizations; and the general public.” Outside agencies are those organizations, stakeholders, or interested parties that are directly involved with cultural resource management on USAG-HI and USAG-Pōhakuloa holdings. At a minimum, CRMs from both USAG-HI and USAG-Pōhakuloa consult with the following organizations:

- Hawai‘i SHPD
- Advisory Council on Historic Preservation
- NHOs
 - Hawai‘i Island Burial Council
 - O‘ahu Island Burial Council
 - Other Native Hawaiian organizations
- Historic Hawai‘i Foundation
- Hawai‘i State OHA
- National Park Service (NPS)

CHAPTER 3 ALTERNATIVES CONSIDERED

3.1 Alternatives Considered

This EA analyzes two alternatives: full implementation of the USAG-HI and USAG-Pōhakuloa ICRMPs and a No Action Alternative. The Proposed Action, implementation of both USAG-HI and USAG-Pōhakuloa ICRMPs, is the preferred alternative. Preparation and full implementation of both ICRMPs are a requirement of DoDI 4715.16 and AR 200-1. Other alternatives, including partial implementation of an ICRMP, were dismissed due to violation of Army regulations.

3.2 No Action Alternative

CEQ regulations (40 CFR 1502.14) require the alternatives analysis to include a No Action Alternative. Section 1502.14(d) of CEQ regulations interprets the update or creation of land management plans, including ICRMPs, to be considered a “no change” alternative verses a “no action” alternative. A “no change” alternative simply means there is no change from current management direction or level of management intensity (CEQ, 1981). Ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed (CEQ, 1981). USAG-HI and USAG-Pōhakuloa need to prepare and implement ICRMPs in order to maintain compliance with cultural resources management rules and regulations. The analysis within this EA for the No Action (i.e., “no change”) Alternative serves as a baseline for comparison of the environmental consequences of implementing the Proposed Action.

CHAPTER 4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This section describes the current condition of the affected environment followed by the environmental consequences of both the Proposed Action and No Action Alternative on each resource. This EA's use of the term "environment" encompasses the physical, biological, cultural, and social aspects that are potentially subject to impacts from implementing an alternative. The description of existing conditions provides the baseline for identifying and evaluating any change that may result from implementation of an alternative. The environmental consequences analysis describes the potential change or impact that could occur to each resource.

4.2 Environmental Factors Not Analyzed in this EA

The following factors are typically considered in environmental analyses, but were not assessed for the Proposed Action and No Action Alternative. Implementation of both ICRMPs will not result in quantifiable, concrete impacts to the resources listed below.

- Coastal Zone Management
- Climate
- Water Quality
- Geology and Geography (except soils)
- Economy
- Hazardous Waste Site Contamination and Cleanup
- Infrastructure
- Noise
- Prime Farmland
- Wild and Scenic Rivers

4.3 Environmental Factors Analyzed in this EA

The following environmental factors have the potential to be impacted and therefore are included in this EA for analysis of the Proposed Action and the No Action Alternatives.

- Military Mission and Land Use
- Air Quality
- Soils
- Water Resources
- Native Ecosystems and Biological Diversity
- Threatened and Endangered Species
- Invasive Species
- Cultural Resources
- Aesthetic and Visual Resources

- Socioeconomics, Protection of Children and Private Property and Environmental Justice
- Cumulative Effects
- Irreversible and Irrecoverable Commitment of Resources

4.3.1 MILITARY MISSION AND LAND USE

USAG-HI

The USAG-HI mission is “Supporting each Warrior, Family and Community with sustainable services, ensuring power projection readiness from Hawai‘i” (USAG-HI 2016).

USAG-HI’s 19 sub-installations occupy significant portions of the island of O‘ahu, particularly the central plateau and the northern Ko‘olau Range. Fort Shafter Military Reservation (FSMR), Āliamanu Military Reservation (AMR), Tripler Army Medical Center (TAMC), and Fort DeRussy Military Reservation (FDR) are all located on the southern portion of O‘ahu. Mākua Military Reservation (MMR) and Wai‘anae-Kai Military Reservation (WMR) are located on the leeward coast of O‘ahu. Dillingham Military Reservation (DMR) and Mokolē‘ia Army Beach (MAB) are located on the north shore of O‘ahu at the base of the Wai‘anae Range. Schofield Barracks Military Reservation (SBMR), including cantonment and training ranges, is situated at the crest of the central O‘ahu plateau. On the southern slope of the plateau are Wheeler Army Airfield (WAAF), Field Station Kunia (FSK), the Kīpapa Ammunition Storage Site (KAS), and the Waikakalaua Ammunition Storage (WAST) site. On the northern slope of the plateau is the Helemano Military Reservation (HMR) and the Pūpūkea-Pa‘ala‘a-Uka Military Road. Kahuku Training Area (KTA) and Kawaihoa Training Area (KLOA) are located in the northern Ko‘olau Mountains, and the Mauna Kapu Communication Station (MKS) is in the southern Wai‘anae Mountains. See Figure 1-1 for USAG-HI sub-installation locations.

USAG-Pōhakuloa

The USAG-Pōhakuloa mission is to “provide support for single service, Joint, and Combined training to afford warfighters the most realistic and flexible training environment available in the Pacific Region.”

PTA is located in the north-central portion of the island, west of the Humu‘ula Saddle, in an area formed by the convergence of three volcanic mountains: Mauna Kea, Mauna Loa, and Hualālai (INRMP-Pōhakuloa 2010). KMC is located within Hawai‘i Volcanoes National Park. USAG-Pōhakuloa owns the buildings while the National Park Service (NPS) owns the land; therefore, NPS has some ongoing responsibility for the management and care of cultural resources on that installation (USAG-Pōhakuloa ICRMP 2017). Kawaihae Military Reservation is located on the leeward west coast of the island of Hawai‘i (USAG-Pōhakuloa ICRMP 2017). See Figure 1-2 for USAG-Pōhakuloa sub-installation locations.

Table 4-1: USAG-HI and USAG-Pōhakuloa Sub-installations Analyzed in This EA

USAG-HI		
Facility	Primary Function	Size (acres)
Āliamanu Military Reservation (AMR)	Military family housing	589.4
Dillingham Military Reservation (DMR)	Training and airfield	618.1
Field Station Kunia (FSK)	Administrative, communications, storage and recreation	31.5
Fort DeRussy Military Reservation (FDR)	U.S. Army Museum of Hawai'i, and military and civilian recreation	68.6
Fort Shafter Military Reservation (FSMR)	9 th U.S. Army Reserve Command headquarters, Support command and control Army organizations and management of on-ground defense of the Pacific theater	596.1
Helemano Military Reservation (HMR)	125 th Signal Battalion Headquarters and military personnel housing	288.9
Kahuku Training Area (KTA)	Troop maneuver and training	9,493.3
Kawailoa Training Area (KLOA)	Limited use of helicopter landing zones and roads	23,539.4
Kīpapa Ammunition Storage Site (KAS)	Tsunami and earthquake detection station with limited regional ammunition storage	3,74.4
Mākua Military Reservation (MMR)	Training	4,280.4
Mauna Kapu Communication Station Site (MKS)	Communications	16.14
Mokulēia Army Beach (MAB)	Recreation	26.4
Pililā'au Army Recreation Center (PARC) within Wai'anae Kai Military Reservation (WMR)	Recreation	13.52

USAG-HI

Facility	Primary Function	Size (acres)
Pūpūkea-Pa‘ala‘a-Uka Military Road (Drum Road) (DRD)	Major transportation hub	109.25
Schofield Barracks Military Reservation (SBMR) (Includes training areas and a cantonment: Schofield Barracks East Range, South Range, West Range, and Schofield Barracks Cantonment)	Post for 25 th Infantry Division and training center	17,428.26
Signal Cable Trunking System	Inactive	0.10
Tripler Army Medical Center (TAMC)	Medical treatment	360.6
Waikakalaua Ammo Storage (WAST)	Inactive	176.1
Wheeler Army Airfield (WAAF)	Training and aviation support	1,588.0

USAG-Pōhakuloa

Facility	Primary Function	Size (acres)
Pōhakuloa Training Area (PTA)	Training	132,268
Kawaihae Military Reservation	Transportation and cargo hub	11
Kīlauea Military Camp (KMC)	Recreation	72 ¹

4.3.1.1 PROPOSED ACTION

The Proposed Action will have a beneficial effect on land use at USAG-HI and USAG-Pōhakuloa facilities. The ICRMPs provide procedures and guidance for events in which land use would have the potential to adversely affect cultural resources and ensure that events are coordinated with the CRM

¹ 72 acres is reported in the HQIIS, but other Department of the Army datasets and National Park Service records report different acreages for KMC.

before actions are taken. The ICRMPs require the Cultural Resources Section to coordinate with land managers before undertaking any archaeological activities that might have the potential to negatively affect the land.

The Proposed Action would have a beneficial impact on USAG-HI and USAG-Pōhakuloa missions during the planning period. Implementation of both ICRMPs would help complete the mission by maintaining Garrison sub-installation compliance with DoDI 4715.16 and AR 200-1. A planning objective of the ICRMPs is to conduct archaeological inventory surveys in areas not adequately surveyed to support training and other projects for the mission. Military training can involve excavations, earth-moving activities, detonation of ordnances, and wildland fire operations, all of which can have a severe impact to the surface and subsurface archaeological record. If during these activities a previously unidentified archaeological resource is found, regulations require that the activity must cease and the CRM has to be notified. Implementation of the ICRMPs would reduce this risk by recommending priority areas for survey and organizing the process for conducting surveys to identify archaeological resources, or areas with high potential for resources, that could be avoided for certain training exercises. Furthermore, the ICRMPs establish standard operating procedures to follow in the event of an inadvertent or unanticipated discovery. ICRMPs are also a mechanism for enhanced education and coordination with military units and other project proponents.

4.3.1.2 NO ACTION ALTERNATIVE

The No Action Alternative would continue with existing management practices. USAG-HI and USAG-Pōhakuloa Cultural Resources Sections currently conduct inventories and evaluations of cultural resources and provide coordination and education between management units. The ICRMPs improve upon these processes by organizing and prioritizing survey, coordination, and educational needs.

Without a coherent and efficient process for coordination between management units, there is an increased risk for inadvertent discoveries and/or damage to cultural resources during training exercises. Interruptions to training and the mission could occur, resulting in a potential lack of troop readiness and negatively impacting the military mission.

4.3.2 AIR QUALITY

According to the Hawai'i Department of Health, Hawai'i enjoys some of the best air quality in the nation. Hawai'i complies with the National Ambient Air Quality Standards, set by the Environmental Protection Agency (EPA) to protect health and welfare from harmful effects of certain commonly occurring pollutants including: carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, sulfur dioxide, and hydrogen sulfide (EPA 2016). Areas are either designated as "attainment" for meeting the ground-level ozone standards or "nonattainment" for not meeting ground-level ozone standards (EPA 2016).

A negative impact to air quality would be any increase in commonly occurring pollutants that would cause adverse effects to human health and welfare and have the potential for an area to be designated as "nonattainment."

USAG-HI

A report created by the EPA's NEPAassist program, January 2017, shows that the entire island of O'ahu is in attainment.

USAG-Pōhakuloa

A report created by the EPA's NEPAassist program, January 2017, shows that the entire island of Hawai'i is in attainment. On the island of Hawai'i, sulfate volcanic emissions reacting with oxygen and moisture in the presence of sunlight form a type of air pollution called "vog," which can temporarily impact island residents. Vog concentrations are dependent on the amount of volcanic emissions, the distance away from the source vents, and the wind speed and direction, and can change drastically on any given day (Hawai'i DOH 2016).

4.3.2.1 PROPOSED ACTION

Implementation of the ICRMPs would not have a regional or statewide impact on air quality. Archaeological surveys and routine maintenance activities conducted during the ICRMPs' planning periods could have the potential to release fugitive dust particles and emissions resulting in negligible short-term effects, but would not foreseeably cause adverse effects to human health and welfare, nor cause any area within an installation to be in "nonattainment."

4.3.2.2 NO ACTION ALTERNATIVE

Air quality would remain in its current condition, in attainment, under the No Action Alternative.

4.3.3 SOILS

The soils of Hawai'i are reflective of the volcanic history of the state, but can vary drastically between islands. Ten soil orders are represented on the Hawaiian Islands (Deenik and McClellan 2007). Rainfall and the amount of time the surface is exposed to weathering play a large role in the soil type of a particular area.

Negative impacts can come in the form of soil compaction, loss of soil structure, soil degradation (e.g., decline in soil quality), and erosion.

USAG-HI

There are seven soil associations on O'ahu which reflect the volcanic history of the area (INRMP-O'ahu 2010). In the mountainous areas and low slopes of the Wai'anae Range, Mahana, Kolekole, Hālawa, Helemano, Kemoo, Kawaihāpai, and Alaka'i soil types can be found (INRMP-O'ahu 2010).

Soil erosion can be locally significant and considered severe in areas where natural drainages and gulches occur (INRMP-O'ahu 2010). Due to the high shrink-swell potential of soils, erosion can be significant where slopes are steep (INRMP-O'ahu 2010). Exposed lava, dry climate, and lack of permanent streambeds may play a role in reducing erosion (INRMP-O'ahu 2010).

USAG-Pōhakuloa

Approximately 80% of PTA is covered by *pāhoehoe* lava, *a'a* lava, and miscellaneous land types (e.g., *pu'us*) (INRMP-Pōhakuloa 2010). Soils are poorly developed and soil erosion is less of an issue on the island of Hawai'i as compared to O'ahu due to the limited amount of soil present. The exception is the northern tier of training areas and northern and western portion of the installation where deep soils can be found (INRMP-Pōhakuloa 2010).

Water erosion on PTA is generally low due to gentle slopes, low soil erosion potential, and low intensity, gentle rainfalls (INRMP-Pōhakuloa 2010). Areas where soils are well-developed have greater potential for soil erosion caused by water and wind (INRMP-Pōhakuloa 2010). Due to inadequate drainage, significant erosion occurs next to roadways (INRMP-Pōhakuloa 2010).

4.3.3.1 PROPOSED ACTION

Implementing the ICRMPs would not result in soil degradation or loss of soil structure. Archaeological surveys and routine maintenance could result in small-scale disturbances to soil, but effects would be negligible and easily remediated if necessary.

4.3.3.2 NO ACTION ALTERNATIVE

Under the No Action Alternative, soil resources would remain unchanged. Archaeological surveys and routine maintenance are ongoing, and the risk for small-scale disturbances to soil exists.

4.3.4 WATER RESOURCES

Water resources can include, but are not limited to, streams, wetlands, lakes, ponds, ocean, and groundwater. Negative impacts to water resources can come in the form of increased sediment and nutrients, changes in temperature, and/or decrease in water quality.

USAG-HI

High level water bodies and basal water bodies are the main sources of groundwater on O'ahu (INRMP-O'ahu 2010) Basal water bodies are created from fresh water derived from infiltration of rainfall, typically from 0 to 40 feet elevation (INRMP-O'ahu 2010). High level water bodies are created from the impounding and accumulation of water in dikes with low permeability (INRMP- O'ahu 2010). The Schofield High Level Water Body, located west of the Wai'anae Mountains, is the major water source for O'ahu installations (INRMP-O'ahu 2010).

The Waikōloa Gulch and the Waikele Stream serve as the primary drainages for SBMR (INRMP-O'ahu 2010). Along the northeast boundary of SBMR flows the North Fork of the Kaukonahua Stream, along with two tributaries (INRM-O'ahu 2010). Many streams on SBMR are intermittent, meaning they typically only flow during the wet season and remain dry during the dry season. All streams on SBMR flow into the Pacific Ocean at Waialua, except for the Waikele, which flows into Pearl Harbor from the north (INRMP-O'ahu 2010). Plants and animals are sustained by rainfall, fog drip, and occasional frost (INRMP-O'ahu 2010).

USAG-Pōhakuloa

Pōhakuloa training lands do not have any surface streams, lakes, or other bodies of water (INRMP-Pōhakuloa 2010). Intermittent stream channels dry quickly after rainfall (INRMP-Pōhakuloa 2010). Rainfall and other water typically leave the site through crevices in the lava to subterranean areas (INRMP-Pōhakuloa 2010).

4.3.4.1 PROPOSED ACTION

The Proposed Action will have a beneficial effect on water resources on USAG-HI and USAG-Pōhakuloa managed lands. The planning objectives for both ICRMPs are to improve coordination between proponents and CRMs and encourage the use of the DPW GIS for more reliable exchange of planning information among programs. Reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of water resources, including intermittent streams, and will ensure that measures are taken to avoid adverse effects to water resources.

4.3.4.2 NO ACTION ALTERNATIVE

Existing water management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk of negative impacts to water resources.

4.3.5 NATIVE ECOSYSTEMS AND BIOLOGICAL DIVERSITY

The Hawaiian Islands support some form of native ecosystems, but more than half of the land is overrun by non-native species. Non-native species can alter the characteristics of native ecosystems and are potential threats to its natural integrity. Cultivation, landscaping, human encroachment, and habitat destruction are all actions that have contributed to the replacement of native ecosystems by non-native-dominated communities.

Biological diversity is defined as the number and variety of species found within a specified geographic region. Hawai'i is one of the most diverse archipelagic regions on earth and has a wide variety of habitats and microclimates in which species can flourish. The Hawaiian Islands are home to a large number of native species, which are an important part of Hawaiian culture.

Past and present military activities have affected native ecosystems and biological diversity through the increase of non-native plant species and habitat destruction. The DoD acknowledged this impact and has implemented an ecosystem-based management approach with the goals of maintaining and improving native ecosystems and the biological diversity of terrestrial and aquatic ecosystems (DoDI 4715.3).

Biological diversity can be affected and potentially limited by the availability of water, nutrients, and space through habitat destruction and the introduction of non-native species

USAG-HI

The 19 Army sub-installations on O'ahu are host to a wide variety of ecological zones, defined by elevation, topography and prevailing ecological conditions and their associated flora and fauna. The sub-installations are a combination of communities classified as native and non-native vegetation, lowland dry, upland shrub, lowland mesic, montane wet, mixed bog, mixed fern/shrub, aquatic natural, and forested.

USAG-Pōhakuloa

The sub-installations on the island of Hawai'i host specialized habitats. PTA is a volcanic desert in the lee of Mauna Kea with many cave and lava tube formations. Kawaihae Military Reservation is on the leeward coast of the Hawai'i Island and is characterized as a marine environment. KMC is in close proximity to and on the leeward side of the volcano and therefore is subject to vog.

In 2013, a vegetation map was created for PTA following the United States National Vegetation Classification System. This mapping effort classified PTA as having 12 vegetation alliances and is dominated by shrubland and woodland land cover types (Block et. al 2013). There are over 30 plant communities, with ~ 300 plant species, identified on PTA (INRMP-Pōhakuloa, 2010). The oldest and most complex of these communities are found in the *kīpukas* (INRMP-Pōhakuloa 2010). These communities range from little to no plant cover, mostly due to lava flows, to species-rich communities (INRMP-Pōhakuloa 2010).

4.3.5.1 PROPOSED ACTION

Implementing the ICRMPs will have a beneficial effect on native ecosystems and biological diversity. The planning objectives for both ICRMPs are to improve coordination between proponents and CRMs and encourage the use of the DPW GIS for more reliable exchange of planning information among programs. Reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of sensitive ecosystems and resources and will ensure that measures are taken to avoid adverse effects to native ecosystems and biological diversity. Improved coordination provides the Natural Resources Program an opportunity to advise on best management practices to avoid negative impacts to these sensitive resources.

4.3.5.2 NO ACTION ALTERNATIVE

Existing ecosystem management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk for negative impacts on native ecosystems and biological diversity.

4.3.6 THREATENED AND ENDANGERED SPECIES

The Garrison's Natural Resources Program is responsible for managing over 100 of the 400 federally listed threatened and endangered species and their critical habitat in Hawai'i (USAG-HI NRP n.d.). The species managed by the Natural Resources Program represent some of the planet's rarest

species, and a majority can only be found on the Hawaiian Islands (USAG-HI NRP n.d.). Some species may be restricted to a single island, and, in some instances, restricted to certain mountain ranges, and many can only be found on Garrison-managed Army lands on the Hawaiian Islands (USAG-HI NRP n.d.). The Natural Resources Program applies an ecosystem-based approach to manage its training lands to restore and protect species and their habitats (USAG-HI NRP n.d.).

The Garrison's Natural Resources Program has developed "implementation teams" that consist of expert biologists from conservation agencies and landowners in Hawai'i to help manage the high number of endangered species on and around Army lands (USAG-HI NRP n.d.). Together, the implementation teams develop implementation plans that describe the actions necessary to stabilize the Army's threatened and endangered species and their habitats (USAG-HI NRP n.d.). By achieving species and habitat stabilization, the Garrison can effectively move species from existing in a state of jeopardy to a state of stability (USAG-HI NRP n.d.).

The Hawai'i Biodiversity and Mapping Program (formerly known as the Hawai'i Natural Heritage Program) maintains a comprehensive database and distribution records of Hawai'i's sensitive species, including those found on Garrison training lands.

USAG-HI

The Nature Conservancy (TNC) of Hawai'i and the Hawai'i Biodiversity and Mapping Program have classified the impact area west of Schofield Barracks, high in the Wai'anae Mountains, as having "extraordinary biological significance" (R.M. Towill Corp. 1997, as cited in INRMP-O'ahu 2010). USAG-HI has documented 114 listed species and 12 proposed endangered species on O'ahu training lands (INRMP-O'ahu 2010). Only one federally listed bird species, O'ahu 'elepaio (*Chasiempis sandwichensis ibidis*), has USFWS designated critical habitat on Schofield Barracks Military Reservation (INRMP-O'ahu 2010).

USAG-Pōhakuloa

Since 1997, Pōhakuloa has conducted annual surveys and monitors for the presence of federally listed species (USAG-HI 2007). Personal communication with USAG-Pōhakuloa staff verifies that annual threatened and endangered species reports are created every year with up-to-date surveys (J. Taomia, personal communication, 21 February 2017 and Lena Schnell, personal communication, 02 June, 2017). To date, these studies have identified 25 endangered, one threatened, and six proposed endangered species on USAG-Pōhakuloa training lands.

4.3.6.1 PROPOSED ACTION

Implementation of the ICRMPs will have a beneficial effect on threatened and endangered species. Archaeological inventory surveys, evaluation of buildings that are 50 years or older, and routine maintenance could occur under the direction of the ICRMPs. These activities may involve localized ground disturbances with the potential to affect threatened and endangered species. However, the ICRMPs streamline the coordination process that occurs between the Cultural Resources Sections and the Natural Resources Program to identify areas where threatened and endangered species exist

and avoid negative effects. Improved coordination would also ensure that the requirements of a Biological Opinion² are adhered to during cultural resources management activities.

4.3.6.2 NO ACTION ALTERNATIVE

Existing threatened and endangered species management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk of adverse impacts to sensitive species.

4.3.7 INVASIVE SPECIES

Invasive species are characterized as species that can outcompete native species for light, space, nutrients, and/or water and require control or eradication. Invasive species can directly or indirectly affect native species by modifying or replacing individual species and/or native ecosystems and interfere with the military mission. Invasive species management is a top priority for the DoD to mitigate adverse impacts from authorized military readiness activities on DoD lands and to minimize the economic, ecologic, and human health impacts that invasive species may cause (EO 13751). Military installations are required to monitor invasive species populations, track the presence over time to determine when control measures are necessary, and to evaluate the effectiveness of prevention, control/eradication, and restoration measures (EO 13751).

USAG-HI and USAG-Pōhakuloa

Numerous invasive plants, mammals, birds, fish, terrestrial and aquatic invertebrates, and herpetofauna occur on USAG-HI and USAG-Pōhakuloa managed lands (INRMP-O'ahu 2010). The invasive species program for each sub-installation spends a considerable amount of time and resources to detect and manage invasive species to reduce negative impacts to sensitive species, the environment, and training operations.

4.3.7.1 PROPOSED ACTION

ICRMP implementation will have a beneficial effect on the management of invasive species. Archaeological surveys and routine maintenance activities have the potential to spread invasive species through the removal of native vegetation and by localized ground disturbance. However, fully implemented management plans can help reduce the chance of invasive species spread from cultural resources activities by improving coordination between the management units. Coordinating activities will allow the Natural Resources staff to identify weedy species in action area, offer advice on how to reduce potential spread, monitor for infestations, and implement control/eradication measures in the event an invasion occurs.

² A Biological Opinion is prepared by the United States Fish and Wildlife Service stating whether a project or proposed activity is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (USFWS 2017).

4.3.7.2 NO ACTION ALTERNATIVE

Invasive species management under the No Action Alternative would remain the same. The Cultural Resources Sections actively coordinate their activities with the Natural Resources Program to reduce risk of invasions as directed by Executive Order 13751.

4.3.8 CULTURAL RESOURCES

Cultural resources laws place different responsibilities upon the Garrison with respect to each type of resource. Cultural resources can include historic buildings, sites, structures, and objects, historic districts, archaeological resources, sacred sites, archaeological collections and associated records, and cultural items.

Historic properties, as established by the NHPA, are any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion, in the NRHP (36 CFR 800.16(l)(1)).

Archeological resources, as defined by the ARPA, include “any material remains of past human life or activities which are of archaeological interest over 100 years old and found in an archaeological context on federal or Indian lands. Federal permits are required to excavate archaeological resources.”

Sacred sites are any specific, discrete, narrowly delineated location of federal land that is identified by an Indian tribe or tribal representative as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the federal agency was notified of its existence by a tribe or authoritative representative of an Indian religion (EO 13007). Executive Order 13007, *Indian Sacred Sites*, requires executive agencies with administrative responsibility of federal land management to accommodate access to and ceremonial use of Indian sacred sites and avoid adversely affecting the physical integrity of sacred sites. This EO does not apply directly to Native Hawaiian organizations, but the spirit of the EO should guide the Garrison in its management.

The NHPA authorizes the Secretary of Interior to promulgate regulations for the proper curation of archaeological collections created under NHPA, the Reservoir Salvage Act, the Antiquities Act, and ARPA (36 CFR §79). Collections and associated records include the curation of federally owned and administered archaeological collections, including collections of material remains such as artifacts, objects, specimens and other physical evidence, that are excavated or removed during a survey, excavation, or other study of a prehistoric or historic resource (36 CFR §79).

Cultural items as defined in 25 U.S.C. 3001 Section 3 (NAGPRA) include human remains, associated funerary objects, unassociated funerary objects, sacred objects, and items of cultural patrimony.

4.3.8.1 CULTURAL RESOURCES INVENTORY

USAG-HI

The following historic buildings, structures, districts, landmarks, archaeological sites, collections, and cultural items are managed by USAG-HI.

Āliamanu Military Reservation (AMR): A *heiau* and burial terrace known as “Salt Lake Heiau” or as “Pu’u Kapu Heiau” is the only known archaeological site at AMR. Subsequent archaeological surveys have discovered no other tangible archaeological sites (McAllister 1933; Takemoto and Joerger 1975; Kamakau 1964; as cited in ICRMP-USAH-HI 2017).

AMR has 119 buildings and structures that are 50+ years old that are in need of evaluation (RPLANS 2016). The underground tunnels and bunkers are also in need of evaluation within the context of other underground military structures.

Dillingham Military Reservation (DMR): Identified archaeological sites at DMR consist of abandoned concrete buildings, a manhole, a terrace complex, a *heiau* structure, and an agricultural complex (McAllister 1933; Takemoto and Joerger 1975; Rosendahl 1977; Moblo 1991; McGerty and Spear 2001; Kamakau 1964; Handy 1940; McGerty and Spear 1997; McGerty & Spear 2009; McGerty & O'Rourke 2010; as cited in ICRMP-USAH-HI 2017). Two sites determined to be eligible for listing include the Kawailoa *heiau* and the Kealia-Kawaihapai Complex. Thirteen sites are determined to be not eligible for listing, with the remaining 22 sites yet to be evaluated.

DMR has six buildings and structures over 50+ years old that are listed in the NRHP (RPLANS 2016).

Field Station Kunia (FSK): A 1998 reconnaissance survey by the Naval Facilities Engineering Command found no evidence of significant archaeological resources. Any potential sites would have been disturbed from previous construction and pineapple cultivation activities (Department of the Navy 1998, as cited in ICRMP-USAH-HI 2017).

FSK contains six buildings and structures that are over 50+ years old. Only one facility is determined eligible for listing (RPLANS 2016). Other FSK facilities were evaluated and determined to be not eligible for listing (U.S. Army Environmental Command 2013) (Department of the Navy 1998, as cited in ICRMP-USAH-HI 2017).

Fort DeRussy Military Reservation (FDR): Identified archaeological sites at FDR include royal fishponds, *auwai* (canal) complex, and burial sites (Elmore and Kennedy 2002; as cited in ICRMP-USAH-HI 2017). Of the known sites, one is determined eligible for listing, four sites are not eligible for listing, and nine sites have yet to be evaluated.

FDR contains three buildings and structures that are 50+ years old requiring evaluation (RPLANS 2016). Battery Randolph is individually listed on the NRHP, along with six other Batteries, as part of the Artillery District of Honolulu Multiple Property.

An Archaeological Collection Summary for Fort DeRussy, Hawai'i was completed in 1996 (USACE 1996a). According to the report, an inadvertent discovery of human remains of six individuals was reported in 1976 during a construction project and the remains were reburied on Fort DeRussy (Davis 1992:18; Rosendahl 1977:1-24, 11-10; as cited in ICRMP-USAH-HI 2017). Human remains of two individuals were also discovered in 1991 and 1992 and left in situ. In 1993, during archaeological monitoring of subsurface utility excavations, between 39 and 52 individuals were discovered

(Carlson et al. 1995:29,40,42,45,4748; Davis 1992:18,44; Rosendahl 1977:1-24,11-10; Simons et al. 1995:48; as cited in ICRMP-USAH-HI 2017); 11 remains were left in situ, one was reinterred on site, and the rest were “exhumed and reinterred in a crypt on Fort DeRussy” (USACE 1996a).

Fort Shafter Military Reservation (FSMR): FSMR contains archaeological sites from both traditional Hawaiian context and the historic era. These include rock shelters, Hawaiian fishponds (now buried under fill), *heiau* structures, a pack trail, and several military sites (Tomonari-Tuggle and Slocumb 2000, as cited in ICRMP-USAH-HI 2017). Of these sites, one is determined not eligible, with 29 sites in need of evaluation.

FSMR has two historic districts and several prominent historic buildings and structures. One hundred thirteen of the buildings and structures have an active historic status (listed, eligible, or contributing to an eligible district), eight are determined not eligible, and 85 buildings are 50+ years old and in need of evaluation (RPLANS 2016).

An Archaeological Collection Summary for Fort Shafter, Hawai'i was completed in 1996 (USACE 1996b). According to the report, the remains of one human skeleton was discovered at Fort Shafter in 1983 and released to the Bishop Museum. No objects are known to be associated with these human remains. The summary notes that "The military reservation (Fort Shafter) was a burial ground extending as far as Pohaha and up inland to the home of one of the sons of the Honorable S.M. Damon..." (Sterling and Summers 1978:327; Rosendahl 1977:1-49; as cited in ICRMP-USAH-HI 2017). The summary also notes the potential for disguised burial caves in steel rocky faces of the more inland portions of gulches at Fort Shafter. It was a common native Hawaiian internment practice to place remains in lava tubes, rock shelters, or niches in steep cliffs. These could be either individual or group burials (Kirch 1985:238; as cited in ICRMP-USAH-HI 2017)" (USACE 1996b). FSMR also has one reburial crypt where the Garrison reinterred human remains recovered from disturbed rock shelter sites within Fort Shafter.

Helemano Military Reservation (HMR): HMR was extensively developed during WWII and the postwar years, and subsequent archaeological surveys did not result in any identified sites (Rosendahl 1977; Fankhauser 1987; Cox and Zulick 2001; as cited in ICRMP-USAH-HI 2017).

HMR has one building considered eligible for the purposes of a Program Comment and six buildings over 50 years old in need of evaluation (RPLANS 2016).

Kahuku Training Area (KTA): Identified archaeological sites at KTA include cooking hearths, habitations, an agricultural complex, and an upland garden. Several archaeological sites are also of post-contact and military origin, including a historic house site, irrigation features, bunkers, and concrete slabs (Burke, de Leeuw, and Hammatt 2013, Monahan 2009, Descantes, Orr, and Desilets 2009, Ogg, Farrell, and Dega 2012, Hawkins, Toney, and Wasson 2014, Patolo, Farrell, and Dega 2010, McGerty and Spear 2004, Robins 2012; as cited in ICRMP-USAH-HI 2017). Of these sites, one Hanakoa Platform, is NRHP-listed, 24 are determined eligible, 35 sites are determined not eligible for listing, and the remaining 122 are yet to be evaluated.

KTA includes several buildings and structures that are associated with WWII and Cold War eras. In total, KTA includes 23 facilities over 50+ years old; 19 of which are contributing elements of an eligible historic district, and three of which are individually eligible for the NRHP (RPLANS 2016). One building has not yet been evaluated.

Kawailoa Training Area (KLOA): Identified archaeological sites include agricultural terraces, rock shelters, habitation complexes, enclosures, pondfield systems, burial areas, and hearths (Rosendahl 1977; Kirch and Sahlins 1992; Anderson 1998; Cox and Zulick 2001; as cited USAG-Hawai'i ICRMP 2017). Of the known sites, five are eligible, two are determined not eligible for listing, and the remaining 72 are yet to be evaluated.

There are no buildings or structures in the RPLANS real property database that are 50+ years old.

Kīpapa Ammunition Storage Site (KAS): There are five known historic-era archaeological sites at KAS, all of which are yet to be evaluated. There are no known prehistoric-era archaeological sites for either the upper or lower Kīpapa Gulch areas.

In total, KAS has 70 buildings and structures over 50 years old in the RPLANS real property database; 68 of these are ammunition storage or air raid/fallout shelter with active historic status (listed, eligible, or contributing to an eligible district). There are an additional 2 air raid/fallout shelters not yet evaluated.

The KAS is a regional ammunition storage facility, largely unused today with the exception of one magazine in the Lower Kīpapa group utilized by the National Oceanic and Atmospheric Administration (NOAA) as a tsunami and earthquake detection station (Pacific Cooperative Studies Unit 2010).

Mākua Military Reservation (MMR): Identified archaeological sites at MMR include *heiau* platforms, agricultural terraces, walls, enclosures, mounds, hearths (*imu*), habitation complexes, paths, and trails (Anderson 1998; Cox and Zulick 2001; Williams 2004; as cited USAG-Hawai'i ICRMP 2017)(Kay et al. 2013:133). Of the known sites, 33 were determined to be ineligible for listing. One site, Ukanipō *heiau*, is listed on the NRHP, 12 are determined eligible for listing, and the remaining 72 sites have yet to be evaluated.

MMR includes one structure over 50+ years old in need of evaluation (RPLANS 2016).

Mauna Kapu Communication Station Site (MKS): MKS contains no identified archaeological sites.

MKS has two buildings over 50+ years old in need of evaluation (RPLANS 2016).

Mokulē'ia Army Beach (MAB): MAB is largely undeveloped and there are no identified archaeological sites (Rosendahl 1977, as cited USAG-Hawai'i ICRMP 2017).

Pililā'au Army Recreation Center (PARC): Pililā'au Army Recreation Center (PARC) is located within Waianae-Kai Military Reservation (WMR). WMR is the official real property site name in which

the PARC is located. For archaeological purposes, WMR is considered a single site and has been assigned State Inventory of Historic Properties by the State of Hawai'i. The site is a highly significant pre-contact and post-contact Native Hawaiian cemetery. Excavations have yielded Native Hawaiian human remains in at least two different areas of the installation. A series of impressive petroglyphs carved into the rocks on the seaward side of the sea wall were exposed and documented in 2016.

The site contains five historic buildings that are 50+ years old (RPLANS 2016).

An Archaeological Collection Summary for Waianae Army Recreation Center, Hawai'i was completed in 1996 (USACE 1996c). According to the report, human remains of at least 33 individuals and thousands of associated funerary objects were recovered at the installation between 1984 and 1990, all of which were reportedly reinterred at the installation. Some were reinterred with their associated funerary objects, but some funerary objects may remain part of collections at other repositories.

Pūpūkea-Pa'ala'a-Uka Military Road (Drum Road): Twenty-three sites were identified in a 2002 survey conducted by Pacific Legacy, Inc. and are in need of an evaluation. Five are traditional Hawaiian in age, and the remaining sites consist largely of military-related development and use of the road. A single metal cross, presumably marking a grave, was also recorded (Whitehead, Cleghorn, and McIntosh 2005, as cited USAG-Hawai'i ICRMP 2017).

There are no buildings or structures that are 50+ years old.

Schofield Barracks Military Reservation (SBMR): As a whole, SBMR contains a total of 134 identified archaeological sites yet to be evaluated. The majority of identified sites are of Native Hawaiian origin and include heiau structures, agricultural terraces, 'auwai, mounds, enclosures, stone alignments, irrigation complexes, pondfields, and roads. SBMR also contains several historic era sites, including concrete foundations, tunnels/bunkers, and a reservoir.

Schofield Barracks Military Reservation as a whole, including cantonment, east (SBER), west (SBWR), and south ranges (SBSR), has 280 buildings and structures with an active historic status (listed, eligible, or contributing to an eligible district) and 5 are determined to be non-contributing elements or not eligible for listing. There are 172 buildings and structures over 50 years of age yet to be evaluated (RPLANS 2016).

Schofield Barracks Cantonment: Previous studies unanimously concluded that more than a century of intensive impacts by military land use, urban development, and commercial agriculture have substantially altered the cultural landscape of the central plateau's tablelands and thus, most, if not all, evidence of traditional cultural activity has been eliminated (Robins, Roberts, and Gilda 2007; Desilets et al. 2011; as cited USAG-Hawai'i ICRMP 2017) (Tetra Tech 2015). There are 10 sites in the cantonment that have yet to be evaluated (Belt Collins 2000a; Roberts, Robins, and Buffum 2004; as cited USAG-Hawai'i ICRMP 2017).

Schofield Barracks East Range (SBER): SBER has 13 known archaeological sites yet to be evaluated, including a terrace with aligned stones, a pecked boulder, and the O‘ahu *nui* stone; as well as historic-era sites, including concrete foundations, a tunnel/bunker, and reservoir (Robins and Spear 1997; as cited USAG-Hawai‘i ICRMP 2017).

Schofield Barracks South Range (SBSR): The majority of identified archaeological sites at SBSR are of Native Hawaiian origin and include agricultural terraces, *‘auwai*, mounds, enclosures, stone alignments, irrigation complexes, pondfields, and roads (Robins and Spear 1997; Anderson 1998; Kaschko et al. 2011; as cited USAG-Hawai‘i ICRMP 2017) (USAEC 2008). Sixty-two sites are in need of evaluation.

Schofield Barracks West Range (SBWR): Most of the known archaeological sites at SBWR and the Battle Area Complex are of Native Hawaiian origin and include *heiau* structures, agricultural terraces, *‘auwai*, fishponds, enclosures, stone alignments and roads (Anderson 1998; Buffum and Peterson 2005; Buffum, Robins, González; and Peterson 2005; DeBaker and Peterson 2009; Robins and Spear 1997; Sims and Hawkins 2014; Kaschko and Tome 2011; Winburn, Byerly, and Mark 2013; as cited USAG-Hawai‘i ICRMP 2017) (USAEC 2008). Forty-nine sites are in need of evaluation.

Signal Cable Trunking System: There are no known archaeological sites on Signal Cable Trunking System lands.

The Signal Cable Trunking System includes 6 communications centers that were preexisting at the time of construction: 30 centers constructed in 1941, and 6 centers added during the Cold War between 1956 and 1989, all of which are yet to be evaluated. The system also includes 17 cable vaults built in 1941 and more than 1,100 miles of cable, all of which still need to be evaluated (RPLANS, 2016)

Tripler Army Medical Center (TAMC): A relatively large portion of TAMC has received archaeological survey coverage. Known archaeological resources include a temporary shelter, an agricultural terrace, and possibly a *heiau* and are in need of evaluation (Rosendahl 1977; Hammatt and Chiogioji 1994; Zulick and Cox 2000; as cited USAG-Hawai‘i ICRMP 2017).

TAMC contains 42 buildings and structures that are 50+ years old. Twenty-five facilities are reported as contributing elements of an eligible Historic District, four facilities reported as non-contributing, and thirteen buildings and structures over 50 years old yet to be evaluated. The family housing under management by Island Palm Communities, LLC are not eligible according to the Programmatic Agreement for the Residential Communities Initiative (RPLANS 2016).

Waikakalaua Ammunition Storage Tunnels (WAST): No archaeological sites are documented for the Waikakalaua Ammo Storage Tunnels site.

The storage site originally supported 52 WWII-era tunnels built into the canyon walls of the Waikakalaua Gulch; 49 of these air raid/fallout shelters remain, 48 of which have an active historic

status (listed, eligible, or contributing to an eligible district), and 1 of which is not yet evaluated (USAEC 2013, RPLANS 2016).

Wheeler Army Airfield (WAAF): A majority of the identified archaeological sites at WAAF are affiliated with the historic era. Eleven sites are in need of evaluation. Potentially eligible sites include the O'ahu Rail and Land Company (OR&L Co.) rail line trestle and the Maunauna Site in the southwestern bluff of Wai'eli Gulch (Rosendahl 1977; Belt Collins 2000b,a; Buffum et al. 2004; as cited USAG-Hawai'i ICRMP 2017). Subsequent surveys found no evidence of traditional Hawaiian or early historic cultural resources.

WAA contains 294 buildings and structures over 50 years old. Two hundred and seven of the buildings and structures have an active historic status (listed, eligible, or contributing to an eligible district), 7 were determined to be noncontributing elements of a historic district, and 80 are yet to be evaluated (RPLANS 2016).

USAG-Pōhakuloa

The following historic buildings, structures, districts, archaeological sites, collections, and cultural items are managed by USAG-Pōhakuloa.

Kawaihae Military Reservation: Kawaihae Military Reservation consists of landfill area; therefore, archaeological sites are not anticipated. In 2001, these findings were confirmed by archaeologists, Cox and Zulick, who asserted that no archaeological remains were located within Kawaihae Military Reservation bounds (Rosendahl 1977; Cox and Zulick 2001; as cited USAG- Pōhakuloa ICRMP 2017).

Most structures on Kawaihae Military Reservation were built between 1959-1985 and consist of wharves, sea walls, offshore moors, and a dock/ramp (Cox and Zulick 2001). Six buildings and structures require evaluation to determine NRHP eligibility.

Kīlauea Military Camp (KMC): No subsurface cultural deposits have been located on KMC. Clearance surveys for the Hawai'i Volcanoes National Park identified five isolated historic period remains (including a stone walkway, an earth mound, a stone path, an L-shaped stone foundation, and a disturbed cement foundation); none were determined to be eligible for listing (Tomonari-Tuggle and Slocumb 2000).

Kīlauea Military Camp (KMC) is a Historic District determined eligible for listing on the NRHP for its association with the development of a recreation camp for U.S. military personnel on the Island of Hawai'i. According to National Park Service records, the Hawai'i SHPD concurred with the National Park Service's determination that Kīlauea Military Camp is eligible for listing on the NRHP in 1996 (National Park Service 2006). The camp is also considered locally significant for its Plantation-style architecture using local materials and adaptation of National Park Service rustic and naturalistic design. According to a 2017 letter from the Superintendent at Hawai'i Volcanoes National Park, there are 103 contributing elements and 42 non-contributing elements within the eligible Historic District,

with two remaining buildings and structures yet to be evaluated (Orlando 2017, as cited USAG-Pōhakuloa ICRMP 2017).³

Pōhakuloa Training Area (PTA): To date, approximately 20% of the impact area and 50% of the area outside the PTA High Hazard Impact Area have been surveyed for cultural resources. Surveys inside of the impact area are conducted as areas are reclaimed for ranges and other training infrastructure. The remaining unsurveyed areas outside of the impact area are primarily in remote areas that are not used for training.

As of Sept. 30, 2016, PTA contains 1,198 known archaeological sites. Thirty-nine sites have been determined eligible for the NRHP. Of the eligible sites, 5 are related to 19th and 20th century contexts, 32 are Traditional Hawaiian sites, 1 is protohistoric, and the period of significance for the one remaining site is not yet identified. Known archaeological sites at PTA represent a diverse range of Native Hawaiian site types, including caves, enclosures, lithic scatters, C-shaped shelters, shrines, platforms, and trails (USAG ICRMP-Pōhakuloa 2017). One site, the Bobcat Trail Habitation Cave, is listed on the National Register, 326 sites have been determined not eligible, and 822 are unevaluated. Of the unevaluated sites, 89 are 19th or 20th century sites, 364 are traditional Hawaiian sites, two span the traditional Hawaiian and historic era contexts, two are recent, and a period of significance has not been identified for 365.

No archaeological sites have been identified in the PTA cantonment or at Bradshaw Army Airfield. Portions of both areas have been surveyed, and subsurface monitoring in both areas has failed to identify any stratified archaeological deposits.

To date, no historic buildings at PTA are determined eligible for the NRHP. Most of the buildings on PTA are Quonset huts dating from 1955-1958. In 2006, the ACHP published a Program Comment for the Department of Defense regarding Cold War Era Unaccompanied Personnel Housing (UPH), and the Army in turn published a historic context on *Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989)* as mitigation for any adverse effects to properties identified under the ACHP Program Comment. Seventy-eight of the buildings at PTA and one building at Bradshaw Army Airfield are considered Cold War-era UPH in accordance with ACHP Program Comment and thus are not subject to further NHPA consultation or mitigation. A consultation is underway with the SHPD for the remaining buildings.

An Archaeological Collection Summary for PTA was completed in 1996 (USACE 1996). USAG-Pōhakuloa identified and repatriated those human remains and cultural items that were within the Garrison's collections described in the 1996 summary. In some cases, human remains, or *iwi kupuna*, were re-interred as an appropriate disposition, in compliance with NAGPRA, and are of high cultural

³ Note: NPS claims 103 contributing resources, 42 non-contributing, and 2 "undetermined" within the KMC district. These numbers do not match Army real property records that show 79 contributing or eligible, 42 non-contributing, and 2 yet to be evaluated.

and traditional religious value. Therefore, locational information is restricted in accordance with the commitments made during consultation for those actions.

4.3.8.2 SACRED SITES

As of June 2017, no sacred sites have been designated at any of the Army installations managed by USAG-HI and USAG-Pōhakuloa.

4.3.8.3 IMPACTS TO CULTURAL RESOURCES

Undertakings that could pose impacts to cultural resources generally involve alterations to a property or the surrounding area, with the most potential for adverse impacts on training lands. Facilities development and improvements, underground and aboveground utilities construction, landscaping and vegetation removal, military training activities, vandalism and looting, and unauthorized excavation of archaeological sites are all potential sources of adverse impacts to cultural resources. For this analysis, an impact will be considered adverse if the impact is significant enough to damage a site's integrity, destroy the research potential of the resource, or prohibit its eligibility for the State Inventory of Historic Properties or the NRHP.

4.3.8.4 PROPOSED ACTION

ICRMP implementation will have a beneficial effect on cultural resources. The goals of both ICRMPs are to consolidate requirements for compliance with NHPA, NEPA, NAGPRA, ARPA and other legal requirements consistent with DoD standards while minimizing effects on the military mission. The ICRMPs provide streamlined direction for routine activities that may have an impact on cultural resources by establishing SOPs, identifying various public consultation requirements, and providing goals that would benefit the management of cultural resources on Garrison lands. As a result of implementation, USAG-HI and USAG-Pōhakuloa will have a concise and well-defined management plan to guide cultural resources identification and management over the next five-year funding cycle (FY2017-FY2021).

4.3.8.5 NO ACTION ALTERNATIVE

Existing management for cultural resources under the No Action Alternative would remain the same. The Cultural Resources Sections comply with applicable legal requirements, actively coordinate their activities with other Garrison management units, and provide education to reduce risk of negative impacts to cultural resources.

4.3.9 AESTHETIC AND VISUAL RESOURCES

Aesthetic and visual resources are defined by the Army as the “components of the environment as perceived through the visual sense only. Aesthetic specifically refers to beauty in both form and appearance” (U.S. Army 2006). Aesthetic and visual resources can include landforms, vegetation, water surfaces, and cultural modifications (physical changes caused by humans) (Lawrence 2007).

Cultural landscapes as defined by National Park Service *Preservation Brief 36: Protecting Cultural Landscapes*, and USACERL *Guidelines for Documenting and Evaluating Historic Military Landscapes* “is a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person exhibiting other cultural or aesthetic values” (Birnbaum 1994).

There are numerous aesthetic and visual resources on Garrison-managed lands. Aesthetic and visual resource types include historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.

An impact to an aesthetic and visual resource can be defined as the degree of change in visual resources and viewer response to those resources caused by an action or project.

4.3.9.1 PROPOSED ACTION

ICRMP implementation will have no effect on aesthetic or visual resources. There are no projects or actions under the Proposed Action that would negatively impact aesthetic and visual resources within and around lands managed by USAG-HI or USAG-Pōhakuloa.

4.3.9.2 NO ACTION ALTERNATIVE

The No Action Alternative would maintain existing conditions and existing cultural resources management practices with respect to visual and aesthetic resources.

4.4 Socioeconomics, Protection of Children and Private Property, Environmental Justice

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, protects children from disproportionately incurring environmental health or safety risks that may arise from federal actions. Health and safety risks to children can be attributed to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to) (EO 13045).

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires federal actions to address environmental justice in minority and low-income populations. Environmental justice analyses are performed to identify potentially disproportionately high and adverse impacts to these target populations and to identify alternatives that might mitigate these impacts.

No racial or ethnic group constitutes a majority in Hawai‘i. The State of Hawai‘i estimates that in 2015 the population of Hawai‘i was 1,431,603 people (Hawai‘i. Census 2017). Asians make up 37.3%, Caucasians 26.7%, Native Hawaiians and other Pacific Islanders constitute 9.9%, Hispanics 10.4%,

and multi-racial groups make up 23% of the population (Hawai'i. Census 2017). Median household income is \$69,515 with 10.6% of the population living in poverty (Hawai'i. Census 2017).

This analysis considers the region of influence from federal actions to be located solely within the boundaries of USAG-HI and USAG-Pōhakuloa controlled lands. Both ICRMPs provide management direction and guidance for only the cultural resources that are within the installation boundaries.

During the development of the ICRMPs, Native Hawaiian organizations and groups that were traditionally associated and/or culturally affiliated with each geographic area were contacted to determine if any of the facilities possessed traditional cultural properties of significance to these groups. No traditional cultural properties were identified.

4.4.1.1 PROPOSED ACTION

Implementing both ICRMPs would not result in adverse effects to air quality, water bodies, nor would any hazardous or toxic materials or wastes be released. Therefore, the Proposed Action would not result in environmental or safety risks that would disproportionately affect children, minority, or low income populations. Implementing both ICRMPs provides a beneficial effect by streamlining the consultation process for individuals and groups that might be affected by USAG-HI and USAG-Pōhakuloa actions.

4.4.1.2 NO ACTION ALTERNATIVE

The No Action Alternative would maintain existing practices and abide by existing legal requirements for consulting with Native Hawaiian populations and other minority groups who may be disproportionately affected by actions on Garrison lands.

4.5 Cumulative Effects

The most devastating environmental effects may result, not from the direct effects of a particular action such as implementation of a management plan, but from the combination of individually minor effects of multiple actions over time (NEPA 2017). Baseline environmental conditions provide the context for evaluating impacts and includes all potentially affected resources, ecosystems, and human communities (NEPA 2017).

Implementing the Proposed Action will not contribute to cumulative effects. It will, however, mark the first version of ICRMPs in place at all of the 22 sub-installations directly managed by USAG-HI and USAG-Pōhakuloa. The ICRMPs are guiding documents without site-specific actions; they complement and inform other management plans such as real property master plans, range complex management plans, or natural resource management plans. Due to the nature of the ICRMP as a management and guiding document without any site-specific actions, there is little opportunity to add to the cumulative effects of installation planning.

4.6 Irreversible and Irretrievable Commitment of Resources

An analysis of irreversible and irretrievable commitment of resources is required as part of the NEPA environmental review process. Irreversible and irretrievable commitment of resources refers to the use of non-renewable resources and the effects that their use will have on future generations (42 USC § 4331 Sec. 101 (v)). Irreversible effects may result from the use or destruction of a specific resource, such as fuel, which cannot be replaced within a reasonable time frame. Irretrievable impacts could result from the loss in value of a resource that can no longer be restored as a result of an action.

ICRMP implementation may require negligible commitments of non-renewable resources such as fuel for vehicle use.

CHAPTER 5 CONCLUSION

Table 5-1: Summary of Environmental, Social, and Economic Impacts

Resource Area	Proposed Action	No Action Alternative
Mission, Location, and Land Use	Beneficial Impact: The ICRMPs provide comprehensive guidance for events in which land use and training exercises have the potential to adversely affect cultural resources. Improved coordination can reduce the risk of interruptions to the mission.	Adverse Impact: Increased risk for inadvertent discoveries and/or damage to cultural resources during training exercises that could lead to interruptions in the mission. Mission interruptions could result in a lack of troop readiness.
Air Quality	Negligible Impact: Possible effect from release of fugitive dust during surveys and maintenance that occur with or without an ICRMP. Fugitive dust release would not foreseeably result in adverse effects to human health, nor cause any installation to be classified as “non-attainment.”	Negligible Impact: Air quality designation would remain unchanged, in attainment. Ongoing survey and maintenance activities might result in negligible short-term negative effects from fugitive dust, but would not result in adverse effects to human health.
Soils	Negligible Impact: ICRMP implementation would not result in soil degradation or loss of soil structure. Archaeological surveys and routine maintenance could result in small-scale disturbances to soil, but effects would be negligible and easily remediated if necessary.	Negligible Impact: Soil resources will remain unchanged from current conditions. The potential for small scale disturbances exists during survey and maintenance activities.
Water Resources	Beneficial Impact: Improved coordination and reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of water resources, including intermittent streams, and will ensure that measures are taken to avoid adverse effects to water resources.	No Impact: Existing coordination to reduce risk of negative impacts to water resources would continue.

Resource Area	Proposed Action	No Action Alternative
Native Ecosystems and Biological Diversity	Beneficial Impact: Improved coordination and reliance on standardized GIS data will allow the Cultural Resources Sections to identify the location of sensitive ecosystems and resources and will ensure that measures are taken to avoid adverse effects to native ecosystems and biological diversity. Improved coordination provides the Natural Resources Program an opportunity to advise on best management practices to avoid negative impacts to these sensitive resources.	No Impact: Existing coordination to reduce risk of negative impacts to native ecosystems and biological diversity would continue.
Threatened and Endangered Species	Beneficial Impact: Improved coordination for identifying areas where threatened and endangered species exist and could be directly or indirectly affected by a project or activity will further protect sensitive species.	No Impact: Existing coordination procedures would continue to reduce risk of negative impacts to threatened and endangered species.
Invasive Species	Beneficial Impact: Improved coordination will allow the Natural Resources Program to identify weedy species in action area, advise on how to reduce potential spread, monitor for infestations, and implement control/eradication measures in the event an invasion occurs.	No Impact: Existing coordination procedures would continue to reduce risk of the accidental invasion and spread of invasive species.
Cultural Resources	Beneficial Impact: The ICRMPs provide comprehensive and efficient management guidance for routine activities that could negatively impact cultural resources, establishes SOPs, and provides goals to benefit the management of cultural resources.	No Impact: Existing management would remain the same. The Cultural Resources Sections comply with applicable legal requirements, actively coordinate their activities with other Garrison management units, and provide education to reduce risk of negative impacts to cultural resources.

Resource Area	Proposed Action	No Action Alternative
Aesthetic and Visual Resources	No Impact: There are no projects or actions under the Proposed Action that would negatively impact aesthetic and visual resources.	No Impact: The No Action Alternative would maintain existing conditions and existing cultural resource management practices with respect to visual and aesthetic resources.
Socioeconomics, Protection of Children and Private Property, and Environmental Justice	No Impact: ICRMP implementation would not result in adverse effects to air quality, water bodies nor would any hazardous or toxic materials or wastes be released that could disproportionately affect children, native populations, and/or minority groups.	No Impact: Current conditions would remain unchanged. Existing management practices and legal requirements require that consultations are held for Native Hawaiian populations and other minority groups who may be disproportionately affected by actions on Garrison lands.

5.1 Conclusion

The legal requirements of DoDI 4715.6 and AR-200-1 mandate that each Army installation develop and implement an ICRMP for use as a planning tool and as the guiding document for cultural resources management decisions. The ICRMPs articulate management procedures and long-range goals for cultural resources on USAG-HI and USAG-Pōhakuloa controlled lands.

Based upon the analysis conducted in this EA, adoption and implementation of both ICRMPs, as written, would not constitute a major federal action significantly affecting the equality of the human environment. An issue of a Finding of No Significant Impact (FNSI) would be appropriate. The preparation of an Environmental Impact Statement (EIS) will not be required before proceeding with implementation of the Proposed Action.

CHAPTER 6 CONSULTATION AND COORDINATION

6.1 Agency Consultation and Coordination

United States Army Garrison, Hawai'i

Graham, Lisa

NEPA Program Manager, Environmental Division

Davis, Richard

Cultural Resource Manager, Environmental Division

United States Army Garrison, Pōhakuloa

Taomia, Julie

Cultural Resources Manager, Environmental Division.

6.2 Public Involvement

An announcement will be made available in the following local papers near USAG-HI and USAG-Pōhakuloa sub-installations to inform the public that both ICRMPs and the EA and draft FNSI are available for public review at nine library locations and on the official USAG-HI website

<https://www.garrison.hawaii.army.mil/NEPA/NEPA.htm>

Newspaper announcement location:

- Honolulu Star-Advertiser
- Hawai'i Tribune Herald
- West Hawai'i Today

Printed copies are made available at the following locations:

- Island of O'ahu library locations
 - Honolulu Library
 - Waianae
 - Waialua Library
 - Mililani Library
 - Wahiawā Library
- Island of Hawai'i library locations
 - Hilo Library
 - Kona Library
 - Waimea Library

Copies of the ICRMPs and the EA and draft FNSI will be dispersed on a CD to the following organizations:

- State Historic Preservation Division
- Hawai'i State Office of Hawaiian Affairs

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32 CFR §651. Environmental Analysis of Army Actions.

36 CFR §61. Secretary of the Interior Professional Qualification Standards.

36 CFR §79. Curation of Federally-Owned and Administered Archaeological Collections.

36 CFR §800. Advisory Council on Historic Preservation.

40 CFR §1500-1508. Protection of Environment.

43 CFR §10. Native American Graves Protection and Repatriation Regulations.

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8.4. APPENDIX D: USAG-Pōhakuloa Cultural Resources Inventory

APPENDIX D.1: USAG-Pōhakuloa Archaeological Site Inventory

Archaeological Site Inventory

1-Jun-2017

Site ID	Location	Age Affiliation	NRHP Status
T-031408-01	Impact Area	Unknown	Cons Eligible
29019	Impact Area	Prehistoric	Eligible
29021	Impact Area	Prehistoric	Eligible
29022	Impact Area	Prehistoric	Eligible
29023	Impact Area	Prehistoric	Eligible
29809	Impact Area	Prehistoric	Eligible
30584	Impact Area	Prehistoric	Eligible
30586	Impact Area	Prehistoric	Eligible
30587	Impact Area	Prehistoric	Eligible
30588	Impact Area	Prehistoric	Eligible
30589	Impact Area	Prehistoric	Eligible
30590	Impact Area	Prehistoric	Eligible
29018	Impact Area	Protohistoric	Eligible
29024	Impact Area	Unknown	Eligible
GTS-2228-073	Impact Area	Unknown	Not Eligible
GTS-2228-092	Impact Area	Unknown	Not Eligible
GTS-2228-123	Impact Area	Prehistoric	Not Eligible
GTS-2228-124	Impact Area	Prehistoric	Not Eligible
GTS-2247-125	Impact Area	Prehistoric	Not Eligible
T-010411-01	Impact Area	Prehistoric	Not Eligible
T-011311-01	Impact Area	Prehistoric	Not Eligible
T-012612-01	Impact Area	Prehistoric	Not Eligible
T-012711-01	Impact Area	Prehistoric	Not Eligible
T-012712-01	Impact Area	Prehistoric	Not Eligible
T-020311-01	Impact Area	Prehistoric	Not Eligible
T-022211-01	Impact Area	Prehistoric	Not Eligible
T-022211-02	Impact Area	Prehistoric	Not Eligible
T-022211-03	Impact Area	Prehistoric	Not Eligible
T-022211-04	Impact Area	Prehistoric	Not Eligible
T-022211-05	Impact Area	Prehistoric	Not Eligible
T-022211-06	Impact Area	Prehistoric	Not Eligible
T-022311-01	Impact Area	Prehistoric	Not Eligible
T-022511-02	Impact Area	Prehistoric	Not Eligible
T-030111-02	Impact Area	Prehistoric	Not Eligible
T-030111-04	Impact Area	Prehistoric	Not Eligible
T-030111-06	Impact Area	Prehistoric	Not Eligible
T-030211-01	Impact Area	Prehistoric	Not Eligible
T-030311-01	Impact Area	Prehistoric	Not Eligible
T-030311-02	Impact Area	Prehistoric	Not Eligible
T-030311-03	Impact Area	Prehistoric	Not Eligible
T-030311-04	Impact Area	Prehistoric	Not Eligible
T-030311-05	Impact Area	Prehistoric	Not Eligible
T-030311-06	Impact Area	Prehistoric	Not Eligible

Site ID	Location	Age Affiliation	NRHP Status
T-030311-07	Impact Area	Prehistoric	Not Eligible
T-030311-08	Impact Area	Prehistoric	Not Eligible
T-030411-01	Impact Area	Prehistoric	Not Eligible
T-032911-01	Impact Area	Prehistoric	Not Eligible
T-032911-02	Impact Area	Prehistoric	Not Eligible
T-032911-03	Impact Area	Prehistoric	Not Eligible
T-032911-04	Impact Area	Prehistoric	Not Eligible
T-032911-05	Impact Area	Prehistoric	Not Eligible
T-032911-06	Impact Area	Prehistoric	Not Eligible
T-033011-01	Impact Area	Prehistoric	Not Eligible
T-033011-02	Impact Area	Prehistoric	Not Eligible
T-033011-03	Impact Area	Prehistoric	Not Eligible
T-033011-04	Impact Area	Prehistoric	Not Eligible
T-033011-05	Impact Area	Prehistoric	Not Eligible
T-033011-06	Impact Area	Prehistoric	Not Eligible
T-033011-07	Impact Area	Prehistoric	Not Eligible
T-033011-08	Impact Area	Prehistoric	Not Eligible
T-040111-01	Impact Area	Prehistoric	Not Eligible
T-040111-02	Impact Area	Prehistoric	Not Eligible
T-040111-03	Impact Area	Prehistoric	Not Eligible
T-040111-04	Impact Area	Prehistoric	Not Eligible
T-040111-05	Impact Area	Prehistoric	Not Eligible
T-040111-06	Impact Area	Prehistoric	Not Eligible
T-040111-07	Impact Area	Prehistoric	Not Eligible
T-040111-08	Impact Area	Prehistoric	Not Eligible
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T-042011-01	Impact Area	Prehistoric	Not Eligible
T-042011-02	Impact Area	Prehistoric	Not Eligible
T-093010-01	Impact Area	Prehistoric	Not Eligible
T-100510-01	Impact Area	Prehistoric	Not Eligible
T-100610-02	Impact Area	Prehistoric	Not Eligible
T-100610-03	Impact Area	Prehistoric	Not Eligible
T-100610-04	Impact Area	Prehistoric	Not Eligible
T-100710-01	Impact Area	Prehistoric	Not Eligible

Site ID	Location	Age Affiliation	NRHP Status
T-100710-02	Impact Area	Prehistoric	Not Eligible
T-100710-03	Impact Area	Prehistoric	Not Eligible
T-100710-04	Impact Area	Prehistoric	Not Eligible
T-100710-05	Impact Area	Prehistoric	Not Eligible
T-100810-01	Impact Area	Prehistoric	Not Eligible
T-100810-02	Impact Area	Prehistoric	Not Eligible
T-100810-03	Impact Area	Prehistoric	Not Eligible
T-100810-04	Impact Area	Prehistoric	Not Eligible
T-101910-01	Impact Area	Prehistoric	Not Eligible
T-101910-02	Impact Area	Prehistoric	Not Eligible
T-102010-01	Impact Area	Prehistoric	Not Eligible
T-102010-02	Impact Area	Prehistoric	Not Eligible
T-102110-02	Impact Area	Prehistoric	Not Eligible
T-102110-03	Impact Area	Prehistoric	Not Eligible
T-102210-05	Impact Area	Prehistoric	Not Eligible
T-102210-06	Impact Area	Prehistoric	Not Eligible
T-102210-07	Impact Area	Prehistoric	Not Eligible
T-102510-01	Impact Area	Prehistoric	Not Eligible
T-102610-01	Impact Area	Prehistoric	Not Eligible
T-102610-02	Impact Area	Prehistoric	Not Eligible
T-102610-03	Impact Area	Prehistoric	Not Eligible
T-102610-04	Impact Area	Prehistoric	Not Eligible
T-102610-06	Impact Area	Prehistoric	Not Eligible
T-102610-11	Impact Area	Prehistoric	Not Eligible
T-102610-12	Impact Area	Prehistoric	Not Eligible
T-102610-13	Impact Area	Prehistoric	Not Eligible
T-102610-14	Impact Area	Prehistoric	Not Eligible
T-102710-01	Impact Area	Prehistoric	Not Eligible
T-102710-03	Impact Area	Prehistoric	Not Eligible
T-102710-04	Impact Area	Prehistoric	Not Eligible
T-102710-05	Impact Area	Prehistoric	Not Eligible
T-102710-06	Impact Area	Prehistoric	Not Eligible
T-102710-07	Impact Area	Prehistoric	Not Eligible
T-102710-08	Impact Area	Prehistoric	Not Eligible
T-102710-11	Impact Area	Prehistoric	Not Eligible
T-102810-02	Impact Area	Prehistoric	Not Eligible
T-102810-03	Impact Area	Prehistoric	Not Eligible
T-102810-04	Impact Area	Prehistoric	Not Eligible
T-102810-05	Impact Area	Prehistoric	Not Eligible
T-102810-06	Impact Area	Prehistoric	Not Eligible
T-102810-07	Impact Area	Prehistoric	Not Eligible
T-102810-10	Impact Area	Prehistoric	Not Eligible
T-111010-02	Impact Area	Prehistoric	Not Eligible
T-120610-01	Impact Area	Prehistoric	Not Eligible
TL-102810-01	Impact Area	Recent	Not Eligible
T-040111-11	Impact Area	UNK	Not Eligible

Site ID	Location	Age Affiliation	NRHP Status
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T-102010-05	Impact Area	UNK	Not Eligible
T-102010-06	Impact Area	UNK	Not Eligible
T-102110-01	Impact Area	UNK	Not Eligible
T-102610-08	Impact Area	UNK	Not Eligible
29020	Impact Area	Unknown	Not Eligible
30585	Impact Area	Unknown	Not Eligible
GTS-2228-004	Impact Area	Unknown	Not Eligible
GTS-2228-005	Impact Area	Unknown	Not Eligible
GTS-2228-006	Impact Area	Unknown	Not Eligible
GTS-2228-011	Impact Area	Unknown	Not Eligible
GTS-2228-012	Impact Area	Unknown	Not Eligible
GTS-2228-013	Impact Area	Unknown	Not Eligible
GTS-2228-014	Impact Area	Unknown	Not Eligible
GTS-2228-015	Impact Area	Unknown	Not Eligible
GTS-2228-016	Impact Area	Unknown	Not Eligible
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GTS-2228-031	Impact Area	Unknown	Not Eligible
GTS-2228-034	Impact Area	Unknown	Not Eligible
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GTS-2228-037	Impact Area	Unknown	Not Eligible
GTS-2228-038	Impact Area	Unknown	Not Eligible
GTS-2228-039	Impact Area	Unknown	Not Eligible
GTS-2228-040	Impact Area	Unknown	Not Eligible
GTS-2228-041	Impact Area	Unknown	Not Eligible
GTS-2228-042	Impact Area	Unknown	Not Eligible
GTS-2228-044	Impact Area	Unknown	Not Eligible
GTS-2228-045	Impact Area	Unknown	Not Eligible
GTS-2228-046	Impact Area	Unknown	Not Eligible
GTS-2228-047	Impact Area	Unknown	Not Eligible
GTS-2228-048	Impact Area	Unknown	Not Eligible
GTS-2228-049	Impact Area	Unknown	Not Eligible
GTS-2228-050	Impact Area	Unknown	Not Eligible
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GTS-2228-052	Impact Area	Unknown	Not Eligible
GTS-2228-053	Impact Area	Unknown	Not Eligible
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GTS-2228-056	Impact Area	Unknown	Not Eligible
GTS-2228-058	Impact Area	Unknown	Not Eligible
GTS-2228-059	Impact Area	Unknown	Not Eligible
GTS-2228-060	Impact Area	Unknown	Not Eligible

Site ID	Location	Age Affiliation	NRHP Status
GTS-2228-061	Impact Area	Unknown	Not Eligible
GTS-2228-062	Impact Area	Unknown	Not Eligible
GTS-2228-063	Impact Area	Unknown	Not Eligible
GTS-2228-064	Impact Area	Unknown	Not Eligible
GTS-2228-065	Impact Area	Unknown	Not Eligible
GTS-2228-066	Impact Area	Unknown	Not Eligible
GTS-2228-067	Impact Area	Unknown	Not Eligible
GTS-2228-068	Impact Area	Unknown	Not Eligible
GTS-2228-069	Impact Area	Unknown	Not Eligible
GTS-2228-070	Impact Area	Unknown	Not Eligible
GTS-2228-071	Impact Area	Unknown	Not Eligible
GTS-2228-072	Impact Area	Unknown	Not Eligible
GTS-2228-074	Impact Area	Unknown	Not Eligible
GTS-2228-075	Impact Area	Unknown	Not Eligible
GTS-2228-076	Impact Area	Unknown	Not Eligible
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GTS-2228-079	Impact Area	Unknown	Not Eligible
GTS-2228-080	Impact Area	Unknown	Not Eligible
GTS-2228-081	Impact Area	Unknown	Not Eligible
GTS-2228-082	Impact Area	Unknown	Not Eligible
GTS-2228-083	Impact Area	Unknown	Not Eligible
GTS-2228-084	Impact Area	Unknown	Not Eligible
GTS-2228-085	Impact Area	Unknown	Not Eligible
GTS-2228-086	Impact Area	Unknown	Not Eligible
GTS-2228-087	Impact Area	Unknown	Not Eligible
GTS-2228-088	Impact Area	Unknown	Not Eligible
GTS-2228-089	Impact Area	Unknown	Not Eligible
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GTS-2228-093	Impact Area	Unknown	Not Eligible
GTS-2228-094	Impact Area	Unknown	Not Eligible
GTS-2228-095	Impact Area	Unknown	Not Eligible
GTS-2228-096	Impact Area	Unknown	Not Eligible
GTS-2228-097	Impact Area	Unknown	Not Eligible
GTS-2228-098	Impact Area	Unknown	Not Eligible
GTS-2228-099	Impact Area	Unknown	Not Eligible
GTS-2228-100	Impact Area	Unknown	Not Eligible
GTS-2228-101	Impact Area	Unknown	Not Eligible
GTS-2228-102	Impact Area	Unknown	Not Eligible
GTS-2228-103	Impact Area	Unknown	Not Eligible
GTS-2228-104	Impact Area	Unknown	Not Eligible
GTS-2228-105	Impact Area	Unknown	Not Eligible
GTS-2228-106	Impact Area	Unknown	Not Eligible
GTS-2228-107	Impact Area	Unknown	Not Eligible
GTS-2228-108	Impact Area	Unknown	Not Eligible
GTS-2228-109	Impact Area	Unknown	Not Eligible

Site ID	Location	Age Affiliation	NRHP Status
GTS-2228-110	Impact Area	Unknown	Not Eligible
GTS-2228-111	Impact Area	Unknown	Not Eligible
GTS-2228-112	Impact Area	Unknown	Not Eligible
GTS-2228-113	Impact Area	Unknown	Not Eligible
GTS-2228-114	Impact Area	Unknown	Not Eligible
GTS-2228-115	Impact Area	Unknown	Not Eligible
GTS-2228-117	Impact Area	Unknown	Not Eligible
GTS-2228-119	Impact Area	Unknown	Not Eligible
GTS-2228-120	Impact Area	Unknown	Not Eligible
GTS-2228-121	Impact Area	Unknown	Not Eligible
GTS-2228-122	Impact Area	Unknown	Not Eligible
GTS-2247-126	Impact Area	Unknown	Not Eligible
GTS-2247-127	Impact Area	Unknown	Not Eligible
GTS-2247-128	Impact Area	Unknown	Not Eligible
GTS-2247-129	Impact Area	Unknown	Not Eligible
GTS-2247-130	Impact Area	Unknown	Not Eligible
GTS-2247-131	Impact Area	Unknown	Not Eligible
GTS-2247-132	Impact Area	Unknown	Not Eligible
GTS-2247-133	Impact Area	Unknown	Not Eligible
GTS-2247-134	Impact Area	Unknown	Not Eligible
GTS-2247-135	Impact Area	Unknown	Not Eligible
GTS-2247-136	Impact Area	Unknown	Not Eligible
GTS-2247-137	Impact Area	Unknown	Not Eligible
GTS-2247-138	Impact Area	Unknown	Not Eligible
GTS-2247-139	Impact Area	Unknown	Not Eligible
GTS-2247-140	Impact Area	Unknown	Not Eligible
GTS-2247-141	Impact Area	Unknown	Not Eligible
GTS-2247-143	Impact Area	Unknown	Not Eligible
GTS-2247-144	Impact Area	Unknown	Not Eligible
GTS-2247-145	Impact Area	Unknown	Not Eligible
GTS-2247-146	Impact Area	Unknown	Not Eligible
GTS-2247-147	Impact Area	Unknown	Not Eligible
GTS-2247-148	Impact Area	Unknown	Not Eligible
T-011113-01	Impact Area	Unknown	Not Eligible
T-022613-01	Impact Area	Unknown	Not Eligible
T-022613-02	Impact Area	Unknown	Not Eligible
T-022613-03	Impact Area	Unknown	Not Eligible
T-030111-01	Impact Area	Unknown	Not Eligible
T-030111-03	Impact Area	Unknown	Not Eligible
T-030111-05	Impact Area	Unknown	Not Eligible
T-040611-03	Impact Area	Unknown	Not Eligible
T-041411-01	Impact Area	Unknown	Not Eligible
T-041411-02	Impact Area	Unknown	Not Eligible
T-041411-03	Impact Area	Unknown	Not Eligible
T-041411-04	Impact Area	Unknown	Not Eligible
T-041411-05	Impact Area	Unknown	Not Eligible

Site ID	Location	Age Affiliation	NRHP Status
T-041411-06	Impact Area	Unknown	Not Eligible
T-041411-07	Impact Area	Unknown	Not Eligible
T-041511-01	Impact Area	Unknown	Not Eligible
T-041511-02	Impact Area	Unknown	Not Eligible
T-041511-03	Impact Area	Unknown	Not Eligible
T-041511-04	Impact Area	Unknown	Not Eligible
T-041511-05	Impact Area	Unknown	Not Eligible
T-041911-05	Impact Area	Unknown	Not Eligible
T-102110-04	Impact Area	Unknown	Not Eligible
T-102110-05	Impact Area	Unknown	Not Eligible
T-102110-06	Impact Area	Unknown	Not Eligible
T-102110-07	Impact Area	Unknown	Not Eligible
T-102110-8	Impact Area	Unknown	Not Eligible
T-102210-01	Impact Area	Unknown	Not Eligible
T-102210-03	Impact Area	Unknown	Not Eligible
T-102210-04	Impact Area	Unknown	Not Eligible
T-110110-01	Impact Area	Unknown	Not Eligible
T-110210-01	Impact Area	Unknown	Not Eligible
T-110210-02	Impact Area	Unknown	Not Eligible
T-110210-03	Impact Area	Unknown	Not Eligible
T-110210-04	Impact Area	Unknown	Not Eligible
T-110210-05	Impact Area	Unknown	Not Eligible
T-110310-01	Impact Area	Unknown	Not Eligible
T-110310-02	Impact Area	Unknown	Not Eligible
T-110310-03	Impact Area	Unknown	Not Eligible
T-110310-04	Impact Area	Unknown	Not Eligible
T-110310-05	Impact Area	Unknown	Not Eligible
T-110310-06	Impact Area	Unknown	Not Eligible
T-110310-07	Impact Area	Unknown	Not Eligible
T-110310-08	Impact Area	Unknown	Not Eligible
T-110310-09	Impact Area	Unknown	Not Eligible
T-110310-12	Impact Area	Unknown	Not Eligible
T-110410-02	Impact Area	Unknown	Not Eligible
T-110410-03	Impact Area	Unknown	Not Eligible
T-110910-01	Impact Area	Unknown	Not Eligible
T-111710-03	Impact Area	Unknown	Not Eligible
T-113012-01	Impact Area	Unknown	Not Eligible
T-113012-02	Impact Area	Unknown	Not Eligible
T-113012-03	Impact Area	Unknown	Not Eligible
T-113012-04	Impact Area	Unknown	Not Eligible
T-113012-05	Impact Area	Unknown	Not Eligible
T-120210-01	Impact Area	Unknown	Not Eligible
TL-111510-02	Impact Area	Unknown	Not Eligible
GTS-2228-091	Impact Area	Unknown	Not Eligible
23466	Impact Area	Historic	Unevaluated
5000	Impact Area	Historic	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-102709-01	Impact Area	Historic	Unevaluated
T-102711-01	Impact Area	Historic	Unevaluated
T-102711-02	Impact Area	Historic	Unevaluated
T-102711-03	Impact Area	Historic	Unevaluated
17148	Impact Area	Prehistoric	Unevaluated
17149	Impact Area	Prehistoric	Unevaluated
18672	Impact Area	Prehistoric	Unevaluated
18673	Impact Area	Prehistoric	Unevaluated
18679	Impact Area	Prehistoric	Unevaluated
21285	Impact Area	Prehistoric	Unevaluated
21299	Impact Area	Prehistoric	Unevaluated
23458	Impact Area	Prehistoric	Unevaluated
23463	Impact Area	Prehistoric	Unevaluated
23464	Impact Area	Prehistoric	Unevaluated
23465	Impact Area	Prehistoric	Unevaluated
23621	Impact Area	Prehistoric	Unevaluated
23625	Impact Area	Prehistoric	Unevaluated
23626	Impact Area	Prehistoric	Unevaluated
GTS-2228-020	Impact Area	Prehistoric	Unevaluated
GTS-2228-021	Impact Area	Prehistoric	Unevaluated
GTS-2228-022	Impact Area	Prehistoric	Unevaluated
GTS-2228-023	Impact Area	Prehistoric	Unevaluated
GTS-2228-024	Impact Area	Prehistoric	Unevaluated
GTS-2228-118	Impact Area	Prehistoric	Unevaluated
GTS-2247-149	Impact Area	Prehistoric	Unevaluated
T-010910-01	Impact Area	Prehistoric	Unevaluated
T-022511-01	Impact Area	Prehistoric	Unevaluated
T-051404-01	Impact Area	Prehistoric	Unevaluated
T-091312-01	Impact Area	Prehistoric	Unevaluated
T-102010-04	Impact Area	Prehistoric	Unevaluated
T-102810-01	Impact Area	Prehistoric	Unevaluated
T-111010-03B	Impact Area	Prehistoric	Unevaluated
T-111010-03C	Impact Area	Prehistoric	Unevaluated
T-113012-06	Impact Area	Prehistoric	Unevaluated
T-113012-07	Impact Area	Prehistoric	Unevaluated
T-113012-08	Impact Area	Prehistoric	Unevaluated
T-113012-09	Impact Area	Prehistoric	Unevaluated
T-113012-10	Impact Area	Prehistoric	Unevaluated
T-120810-01	Impact Area	Prehistoric	Unevaluated
T-120910-01	Impact Area	Prehistoric	Unevaluated
T-121610-01	Impact Area	Prehistoric	Unevaluated
T-122211-01	Impact Area	Prehistoric	Unevaluated
TL-111010-03	Impact Area	Prehistoric	Unevaluated
TL-111610-02	Impact Area	Prehistoric	Unevaluated
TL-111710-05	Impact Area	Prehistoric	Unevaluated
TL-111710-06	Impact Area	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
TL-120910-02	Impact Area	Prehistoric	Unevaluated
TL-121410-02	Impact Area	Prehistoric	Unevaluated
TL-122910-01	Impact Area	Prehistoric	Unevaluated
T-031308-01	Impact Area	Unknown	Unevaluated
23470	Impact Area	Unknown	Unevaluated
T-011110-01	Impact Area	Unknown	Unevaluated
T-050112-01	Impact Area	Unknown	Unevaluated
T-050312-02	Impact Area	Unknown	Unevaluated
T-050912-01	Impact Area	Unknown	Unevaluated
T-050912-02	Impact Area	Unknown	Unevaluated
T-050912-03	Impact Area	Unknown	Unevaluated
T-051012-02	Impact Area	Unknown	Unevaluated
T-051012-03	Impact Area	Unknown	Unevaluated
T-051012-05A	Impact Area	Unknown	Unevaluated
T-051012-05B	Impact Area	Unknown	Unevaluated
T-051012-05C	Impact Area	Unknown	Unevaluated
T-051012-05D	Impact Area	Unknown	Unevaluated
T-051112-03A	Impact Area	Unknown	Unevaluated
T-051112-03B	Impact Area	Unknown	Unevaluated
T-051112-03C	Impact Area	Unknown	Unevaluated
T-051112-05A	Impact Area	Unknown	Unevaluated
T-051112-05B	Impact Area	Unknown	Unevaluated
T-051512-01	Impact Area	Unknown	Unevaluated
T-051704-04	Impact Area	Unknown	Unevaluated
T-051712-01	Impact Area	Unknown	Unevaluated
T-051812-01	Impact Area	Unknown	Unevaluated
T-051812-02	Impact Area	Unknown	Unevaluated
T-051812-03	Impact Area	Unknown	Unevaluated
T-052212-01	Impact Area	Unknown	Unevaluated
T-052312-01	Impact Area	Unknown	Unevaluated
T-052412-01	Impact Area	Unknown	Unevaluated
T-053012-01	Impact Area	Unknown	Unevaluated
T-053112-01	Impact Area	Unknown	Unevaluated
T-060512-01	Impact Area	Unknown	Unevaluated
T-060712-01	Impact Area	Unknown	Unevaluated
T-070212-01	Impact Area	Unknown	Unevaluated
T-070212-02	Impact Area	Unknown	Unevaluated
T-070212-03	Impact Area	Unknown	Unevaluated
T-070212-04	Impact Area	Unknown	Unevaluated
T-091112-01	Impact Area	Unknown	Unevaluated
T-091112-02	Impact Area	Unknown	Unevaluated
T-091212-01	Impact Area	Unknown	Unevaluated
T-091212-02	Impact Area	Unknown	Unevaluated
T-091312-01	Impact Area	Unknown	Unevaluated
T-091412-01	Impact Area	Unknown	Unevaluated
T-091412-02	Impact Area	Unknown	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-091812-01	Impact Area	Unknown	Unevaluated
T-091812-02	Impact Area	Unknown	Unevaluated
T-091812-03	Impact Area	Unknown	Unevaluated
T-091912-01	Impact Area	Unknown	Unevaluated
T-091912-02	Impact Area	Unknown	Unevaluated
T-091912-03	Impact Area	Unknown	Unevaluated
T-092012-01	Impact Area	Unknown	Unevaluated
T-092112-01A	Impact Area	Unknown	Unevaluated
T-092112-01B	Impact Area	Unknown	Unevaluated
T-092112-01C	Impact Area	Unknown	Unevaluated
T-092512-01	Impact Area	Unknown	Unevaluated
T-092512-02	Impact Area	Unknown	Unevaluated
T-092812-01	Impact Area	Unknown	Unevaluated
T-092812-02A	Impact Area	Unknown	Unevaluated
T-092812-02B	Impact Area	Unknown	Unevaluated
T-092812-02C	Impact Area	Unknown	Unevaluated
T-100212-01	Impact Area	Unknown	Unevaluated
T-100212-02	Impact Area	Unknown	Unevaluated
T-100312-01	Impact Area	Unknown	Unevaluated
T-100312-02A	Impact Area	Unknown	Unevaluated
T-100312-02B	Impact Area	Unknown	Unevaluated
T-100412-01	Impact Area	Unknown	Unevaluated
T-100412-02A	Impact Area	Unknown	Unevaluated
T-100412-02B	Impact Area	Unknown	Unevaluated
T-100412-02C	Impact Area	Unknown	Unevaluated
T-100912-01	Impact Area	Unknown	Unevaluated
T-100912-02	Impact Area	Unknown	Unevaluated
T-101212-01	Impact Area	Unknown	Unevaluated
T-101712-01A	Impact Area	Unknown	Unevaluated
T-101712-01B	Impact Area	Unknown	Unevaluated
T-101712-02	Impact Area	Unknown	Unevaluated
T-101712-03A	Impact Area	Unknown	Unevaluated
T-101712-03B	Impact Area	Unknown	Unevaluated
T-101712-03C	Impact Area	Unknown	Unevaluated
T-101812-01	Impact Area	Unknown	Unevaluated
T-102512-01	Impact Area	Unknown	Unevaluated
T-102512-02A	Impact Area	Unknown	Unevaluated
T-102512-02B	Impact Area	Unknown	Unevaluated
T-102512-02C	Impact Area	Unknown	Unevaluated
T-102512-02D	Impact Area	Unknown	Unevaluated
T-102512-02E	Impact Area	Unknown	Unevaluated
T-103112-01A	Impact Area	Unknown	Unevaluated
T-103112-01B	Impact Area	Unknown	Unevaluated
T-103112-01C	Impact Area	Unknown	Unevaluated
T-103112-02A	Impact Area	Unknown	Unevaluated
T-103112-02B	Impact Area	Unknown	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-110112-01	Impact Area	Unknown	Unevaluated
T-111912-01	Impact Area	Unknown	Unevaluated
23472	KMA	Historic	Cons Eligible
23473	KMA	Historic	Cons Eligible
23491	KMA	Historic	Cons Eligible
23496	KMA	Historic	Cons Eligible
23540	KMA	Historic	Cons Eligible
23541	KMA	Historic	Cons Eligible
26912	KMA	Historic	Cons Eligible
28530	KMA	Historic	Cons Eligible
28532	KMA	Historic	Cons Eligible
T-090209-01	KMA	Historic	Cons Eligible
20854	KMA	Historic	Eligible
20855	KMA	Historic	Eligible
22933	KMA	Historic	Not Eligible
23468	KMA	Historic	Not Eligible
T-061010-02	KMA	Historic	Not Eligible
T-062409-01	KMA	Historic	Not Eligible
23490	KMA	Prehistoric	Not Eligible
23469	KMA	Recent	Not Eligible
23471	KMA	Recent	Not Eligible
23486	KMA	Recent	Not Eligible
23489	KMA	Recent	Not Eligible
26911	KMA	Recent	Not Eligible
G729	KMA	Recent	Not Eligible
G793	KMA	Recent	Not Eligible
G797	KMA	Recent	Not Eligible
G798	KMA	Recent	Not Eligible
T-062509-01	KMA	Unknown	Not Eligible
21132	KMA	Historic	Unevaluated
23467	KMA	Historic	Unevaluated
23488	KMA	Historic	Unevaluated
23492	KMA	Historic	Unevaluated
23493	KMA	Historic	Unevaluated
23494	KMA	Historic	Unevaluated
23495	KMA	Historic	Unevaluated
23498	KMA	Historic	Unevaluated
23499	KMA	Historic	Unevaluated
23500	KMA	Historic	Unevaluated
23505	KMA	Historic	Unevaluated
23506	KMA	Historic	Unevaluated
23508	KMA	Historic	Unevaluated
23509	KMA	Historic	Unevaluated
23510	KMA	Historic	Unevaluated
23512	KMA	Historic	Unevaluated
23513	KMA	Historic	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
23514	KMA	Historic	Unevaluated
23516	KMA	Historic	Unevaluated
23517	KMA	Historic	Unevaluated
23518	KMA	Historic	Unevaluated
23519	KMA	Historic	Unevaluated
23520	KMA	Historic	Unevaluated
23521	KMA	Historic	Unevaluated
23522	KMA	Historic	Unevaluated
23524	KMA	Historic	Unevaluated
23525	KMA	Historic	Unevaluated
23526	KMA	Historic	Unevaluated
23528	KMA	Historic	Unevaluated
23529	KMA	Historic	Unevaluated
23530	KMA	Historic	Unevaluated
23531	KMA	Historic	Unevaluated
23532	KMA	Historic	Unevaluated
23533	KMA	Historic	Unevaluated
23534	KMA	Historic	Unevaluated
23536	KMA	Historic	Unevaluated
23537	KMA	Historic	Unevaluated
23538	KMA	Historic	Unevaluated
23539	KMA	Historic	Unevaluated
23542	KMA	Historic	Unevaluated
23543	KMA	Historic	Unevaluated
23576	KMA	Historic	Unevaluated
23578	KMA	Historic	Unevaluated
23579	KMA	Historic	Unevaluated
23580	KMA	Historic	Unevaluated
23593	KMA	Historic	Unevaluated
23594	KMA	Historic	Unevaluated
23597	KMA	Historic	Unevaluated
23599	KMA	Historic	Unevaluated
23600	KMA	Historic	Unevaluated
23620	KMA	Historic	Unevaluated
27874	KMA	Historic	Unevaluated
T-011614-01	KMA	Historic	Unevaluated
T-011614-02	KMA	Historic	Unevaluated
T-013114-01	KMA	Historic	Unevaluated
T-052215-01	KMA	Historic	Unevaluated
T-062811-01	KMA	Historic	Unevaluated
T-062811-02	KMA	Historic	Unevaluated
T-070811-03	KMA	Historic	Unevaluated
T-070811-04	KMA	Historic	Unevaluated
T-081512-01	KMA	Historic	Unevaluated
T-111209-01	KMA	Historic	Unevaluated
T-111209-02	KMA	Historic	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-111209-03	KMA	Historic	Unevaluated
T-111209-04	KMA	Historic	Unevaluated
T-121813-01	KMA	Historic	Unevaluated
T-121813-02	KMA	Historic	Unevaluated
23501	KMA	Prehistoric	Unevaluated
23523	KMA	Prehistoric	Unevaluated
23527	KMA	Prehistoric	Unevaluated
23591	KMA	Prehistoric	Unevaluated
28531	KMA	Prehistoric	Unevaluated
23487	KMA	Recent	Unevaluated
23515	KMA	Recent	Unevaluated
22929	KMA	Unknown	Unevaluated
23497	KMA	Unknown	Unevaluated
23502	KMA	Unknown	Unevaluated
23503	KMA	Unknown	Unevaluated
23504	KMA	Unknown	Unevaluated
23511	KMA	Unknown	Unevaluated
23588	KMA	Unknown	Unevaluated
23592	KMA	Unknown	Unevaluated
T-031809-01	KMA	Unknown	Unevaluated
T-031809-05	KMA	Unknown	Unevaluated
T-032009-02	KMA	Unknown	Unevaluated
T-051109-01	KMA	Unknown	Unevaluated
T-051209-01	KMA	Unknown	Unevaluated
T-051209-02	KMA	Unknown	Unevaluated
T-052108-01	KMA	Unknown	Unevaluated
T-062811-03	KMA	Unknown	Unevaluated
T-062811-04	KMA	Unknown	Unevaluated
T-062911-01	KMA	Unknown	Unevaluated
T-071911-01	KMA	Unknown	Unevaluated
23846	TA 1	Historic	Unevaluated
T-080206-01	TA 1	Historic	Unevaluated
23842	TA 1	Unknown	Unevaluated
23843	TA 1	Unknown	Unevaluated
23844	TA 1	Unknown	Unevaluated
23845	TA 1	Unknown	Unevaluated
7119	TA 1?	Historic	Eligible
23452	TA 1-17, KMA	Historic	Eligible
23450	TA 15	Prehistoric	Unevaluated
23386	TA 16	Historic	Unevaluated
23383	TA 16	Prehistoric	Unevaluated
23384	TA 16	Prehistoric	Unevaluated
23370	TA 17	Prehistoric	Unevaluated
23371	TA 17	Prehistoric	Unevaluated
23377	TA 17	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
23380	TA 17	Prehistoric	Unevaluated
23381	TA 17	Prehistoric	Unevaluated
5009	TA 17	Prehistoric	Unevaluated
23379	TA 17	Unknown	Unevaluated
28584	TA 21	Historic	Unevaluated
T-070110-02	TA 21	Historic	Unevaluated
18671	TA 21	Prehistoric	Unevaluated
18674	TA 21	Prehistoric	Unevaluated
18675	TA 21	Prehistoric	Unevaluated
18676	TA 21	Prehistoric	Unevaluated
21281	TA 21	Prehistoric	Unevaluated
21282	TA 21	Prehistoric	Unevaluated
21283	TA 21	Prehistoric	Unevaluated
21284	TA 21	Prehistoric	Unevaluated
21286	TA 21	Prehistoric	Unevaluated
21287	TA 21	Prehistoric	Unevaluated
21288	TA 21	Prehistoric	Unevaluated
21289	TA 21	Prehistoric	Unevaluated
21290	TA 21	Prehistoric	Unevaluated
21291	TA 21	Prehistoric	Unevaluated
21292	TA 21	Prehistoric	Unevaluated
21293	TA 21	Prehistoric	Unevaluated
21295	TA 21	Prehistoric	Unevaluated
21296	TA 21	Prehistoric	Unevaluated
21297	TA 21	Prehistoric	Unevaluated
21298	TA 21	Prehistoric	Unevaluated
21300	TA 21	Prehistoric	Unevaluated
21301	TA 21	Prehistoric	Unevaluated
21302	TA 21	Prehistoric	Unevaluated
21304	TA 21	Prehistoric	Unevaluated
21305	TA 21	Prehistoric	Unevaluated
21307	TA 21	Prehistoric	Unevaluated
21308	TA 21	Prehistoric	Unevaluated
21309	TA 21	Prehistoric	Unevaluated
21310	TA 21	Prehistoric	Unevaluated
21311	TA 21	Prehistoric	Unevaluated
21312	TA 21	Prehistoric	Unevaluated
21483	TA 21	Prehistoric	Unevaluated
21484	TA 21	Prehistoric	Unevaluated
21485	TA 21	Prehistoric	Unevaluated
21486	TA 21	Prehistoric	Unevaluated
21487	TA 21	Prehistoric	Unevaluated
21488	TA 21	Prehistoric	Unevaluated
21489	TA 21	Prehistoric	Unevaluated
21490	TA 21	Prehistoric	Unevaluated
21491	TA 21	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
21492	TA 21	Prehistoric	Unevaluated
21493	TA 21	Prehistoric	Unevaluated
21494	TA 21	Prehistoric	Unevaluated
21495	TA 21	Prehistoric	Unevaluated
21496	TA 21	Prehistoric	Unevaluated
21497	TA 21	Prehistoric	Unevaluated
21498	TA 21	Prehistoric	Unevaluated
21499	TA 21	Prehistoric	Unevaluated
21500	TA 21	Prehistoric	Unevaluated
21501	TA 21	Prehistoric	Unevaluated
21502	TA 21	Prehistoric	Unevaluated
21503	TA 21	Prehistoric	Unevaluated
21666	TA 21	Prehistoric	Unevaluated
21667	TA 21	Prehistoric	Unevaluated
21668	TA 21	Prehistoric	Unevaluated
21669	TA 21	Prehistoric	Unevaluated
21670	TA 21	Prehistoric	Unevaluated
21671	TA 21	Prehistoric	Unevaluated
21672	TA 21	Prehistoric	Unevaluated
21673	TA 21	Prehistoric	Unevaluated
21674	TA 21	Prehistoric	Unevaluated
21750	TA 21	Prehistoric	Unevaluated
21807	TA 21	Prehistoric	Unevaluated
23535	TA 21	Prehistoric	Unevaluated
23544	TA 21	Prehistoric	Unevaluated
23545	TA 21	Prehistoric	Unevaluated
23546	TA 21	Prehistoric	Unevaluated
23558	TA 21	Prehistoric	Unevaluated
23559	TA 21	Prehistoric	Unevaluated
23561	TA 21	Prehistoric	Unevaluated
23622	TA 21	Prehistoric	Unevaluated
24385	TA 21	Prehistoric	Unevaluated
28585	TA 21	Prehistoric	Unevaluated
28586	TA 21	Prehistoric	Unevaluated
28587	TA 21	Prehistoric	Unevaluated
28588	TA 21	Prehistoric	Unevaluated
28589	TA 21	Prehistoric	Unevaluated
28590	TA 21	Prehistoric	Unevaluated
28591	TA 21	Prehistoric	Unevaluated
28592	TA 21	Prehistoric	Unevaluated
28593	TA 21	Prehistoric	Unevaluated
28594	TA 21	Prehistoric	Unevaluated
T-031104-1	TA 21	Prehistoric	Unevaluated
T-031212-04	TA 21	Prehistoric	Unevaluated
T-032812-03	TA 21	Prehistoric	Unevaluated
T-032812-04	TA 21	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-041902-01	TA 21	Prehistoric	Unevaluated
T-041902-02	TA 21	Prehistoric	Unevaluated
T-041902-03	TA 21	Prehistoric	Unevaluated
T-061704-01	TA 21	Prehistoric	Unevaluated
T-062206-01	TA 21	Prehistoric	Unevaluated
TL-080310-01	TA 21	Prehistoric	Unevaluated
21294	TA 21	Unknown	Unevaluated
21303	TA 21	Unknown	Unevaluated
21306	TA 21	Unknown	Unevaluated
21313	TA 21	Unknown	Unevaluated
21314	TA 21	Unknown	Unevaluated
21315	TA 21	Unknown	Unevaluated
21316	TA 21	Unknown	Unevaluated
23560	TA 21	Unknown	Unevaluated
T-021705-01	TA 21	Unknown	Unevaluated
5004	TA 22	Prehistoric/Historic	Listed
GTS-2228-003	TA 22	Recent	Not Eligible
GTS-2228-001	TA 22	Unknown	Not Eligible
GTS-2228-002	TA 22	Unknown	Not Eligible
GTS-2228-007	TA 22	Unknown	Not Eligible
21169	TA 22	Historic	Unevaluated
5006	TA 22	Historic	Unevaluated
5007	TA 22	Historic	Unevaluated
5008	TA 22	Historic	Unevaluated
T-051613-01	TA 22	Historic	Unevaluated
T-062906-48B	TA 22	Historic	Unevaluated
T-102808-01	TA 22	Historic	Unevaluated
T-122106-01	TA 22	Historic	Unevaluated
10221	TA 22	Prehistoric	Unevaluated
10222	TA 22	Prehistoric	Unevaluated
10265	TA 22	Prehistoric	Unevaluated
17117	TA 22	Prehistoric	Unevaluated
17118	TA 22	Prehistoric	Unevaluated
17124	TA 22	Prehistoric	Unevaluated
17127	TA 22	Prehistoric	Unevaluated
17128	TA 22	Prehistoric	Unevaluated
17129	TA 22	Prehistoric	Unevaluated
17130	TA 22	Prehistoric	Unevaluated
17131	TA 22	Prehistoric	Unevaluated
17132	TA 22	Prehistoric	Unevaluated
17133	TA 22	Prehistoric	Unevaluated
17134	TA 22	Prehistoric	Unevaluated
17135	TA 22	Prehistoric	Unevaluated
17136	TA 22	Prehistoric	Unevaluated
17137	TA 22	Prehistoric	Unevaluated
17147	TA 22	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
17150	TA 22	Prehistoric	Unevaluated
17151	TA 22	Prehistoric	Unevaluated
17153	TA 22	Prehistoric	Unevaluated
17154	TA 22	Prehistoric	Unevaluated
17157	TA 22	Prehistoric	Unevaluated
17159	TA 22	Prehistoric	Unevaluated
17160	TA 22	Prehistoric	Unevaluated
17161	TA 22	Prehistoric	Unevaluated
17162	TA 22	Prehistoric	Unevaluated
17164	TA 22	Prehistoric	Unevaluated
17165	TA 22	Prehistoric	Unevaluated
17166	TA 22	Prehistoric	Unevaluated
19491	TA 22	Prehistoric	Unevaluated
19492	TA 22	Prehistoric	Unevaluated
19493	TA 22	Prehistoric	Unevaluated
19494	TA 22	Prehistoric	Unevaluated
19495	TA 22	Prehistoric	Unevaluated
19496	TA 22	Prehistoric	Unevaluated
19497	TA 22	Prehistoric	Unevaluated
19498	TA 22	Prehistoric	Unevaluated
19499	TA 22	Prehistoric	Unevaluated
19500	TA 22	Prehistoric	Unevaluated
19501	TA 22	Prehistoric	Unevaluated
19502	TA 22	Prehistoric	Unevaluated
19503	TA 22	Prehistoric	Unevaluated
19504	TA 22	Prehistoric	Unevaluated
19505	TA 22	Prehistoric	Unevaluated
19506	TA 22	Prehistoric	Unevaluated
19507	TA 22	Prehistoric	Unevaluated
19508	TA 22	Prehistoric	Unevaluated
19509	TA 22	Prehistoric	Unevaluated
19510	TA 22	Prehistoric	Unevaluated
19511	TA 22	Prehistoric	Unevaluated
19512	TA 22	Prehistoric	Unevaluated
19513	TA 22	Prehistoric	Unevaluated
19514	TA 22	Prehistoric	Unevaluated
19515	TA 22	Prehistoric	Unevaluated
19516	TA 22	Prehistoric	Unevaluated
19517	TA 22	Prehistoric	Unevaluated
19518	TA 22	Prehistoric	Unevaluated
19519	TA 22	Prehistoric	Unevaluated
19520	TA 22	Prehistoric	Unevaluated
19521	TA 22	Prehistoric	Unevaluated
19522	TA 22	Prehistoric	Unevaluated
19523	TA 22	Prehistoric	Unevaluated
19524	TA 22	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
19525	TA 22	Prehistoric	Unevaluated
19526	TA 22	Prehistoric	Unevaluated
19527	TA 22	Prehistoric	Unevaluated
19528	TA 22	Prehistoric	Unevaluated
19529	TA 22	Prehistoric	Unevaluated
21164	TA 22	Prehistoric	Unevaluated
21165	TA 22	Prehistoric	Unevaluated
21166	TA 22	Prehistoric	Unevaluated
21167	TA 22	Prehistoric	Unevaluated
21168	TA 22	Prehistoric	Unevaluated
21170	TA 22	Prehistoric	Unevaluated
21171	TA 22	Prehistoric	Unevaluated
21172	TA 22	Prehistoric	Unevaluated
21317	TA 22	Prehistoric	Unevaluated
21318	TA 22	Prehistoric	Unevaluated
21321	TA 22	Prehistoric	Unevaluated
21322	TA 22	Prehistoric	Unevaluated
23694	TA 22	Prehistoric	Unevaluated
24278	TA 22	Prehistoric	Unevaluated
25004	TA 22	Prehistoric	Unevaluated
C-012705-03	TA 22	Prehistoric	Unevaluated
C-012705-04	TA 22	Prehistoric	Unevaluated
C-012705-05	TA 22	Prehistoric	Unevaluated
C-020107-1	TA 22	Prehistoric	Unevaluated
C-020608-01	TA 22	Prehistoric	Unevaluated
C-031705-01	TA 22	Prehistoric	Unevaluated
C-031705-02	TA 22	Prehistoric	Unevaluated
C-031705-03	TA 22	Prehistoric	Unevaluated
C-031705-04	TA 22	Prehistoric	Unevaluated
C-031705-05	TA 22	Prehistoric	Unevaluated
C-031705-06	TA 22	Prehistoric	Unevaluated
T-012307-01	TA 22	Prehistoric	Unevaluated
T-012415-01	TA 22	Prehistoric	Unevaluated
T-012805-02	TA 22	Prehistoric	Unevaluated
T-012914-01	TA 22	Prehistoric	Unevaluated
T-020305-01	TA 22	Prehistoric	Unevaluated
T-020305-02	TA 22	Prehistoric	Unevaluated
T-020707-01	TA 22	Prehistoric	Unevaluated
T-020907-01	TA 22	Prehistoric	Unevaluated
T-021908-01	TA 22	Prehistoric	Unevaluated
T-022008-02	TA 22	Prehistoric	Unevaluated
T-022306-01	TA 22	Prehistoric	Unevaluated
T-041310-1	TA 22	Prehistoric	Unevaluated
T-041410-1	TA 22	Prehistoric	Unevaluated
T-041410-2	TA 22	Prehistoric	Unevaluated
T-041910-1	TA 22	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-041910-2	TA 22	Prehistoric	Unevaluated
T-042010-1	TA 22	Prehistoric	Unevaluated
T-042010-2	TA 22	Prehistoric	Unevaluated
T-042010-3	TA 22	Prehistoric	Unevaluated
T-042010-4	TA 22	Prehistoric	Unevaluated
T-042110-1	TA 22	Prehistoric	Unevaluated
T-042110-2	TA 22	Prehistoric	Unevaluated
T-042110-3	TA 22	Prehistoric	Unevaluated
T-042210-1	TA 22	Prehistoric	Unevaluated
T-042910-1	TA 22	Prehistoric	Unevaluated
T-042910-2	TA 22	Prehistoric	Unevaluated
T-042910-3	TA 22	Prehistoric	Unevaluated
T-043010-4	TA 22	Prehistoric	Unevaluated
T-043094-01	TA 22	Prehistoric	Unevaluated
T-050914-01	TA 22	Prehistoric	Unevaluated
T-053106-01B	TA 22	Prehistoric	Unevaluated
T-053106-05B	TA 22	Prehistoric	Unevaluated
T-053106-06B	TA 22	Prehistoric	Unevaluated
T-060106-17B	TA 22	Prehistoric	Unevaluated
T-060106-23B	TA 22	Prehistoric	Unevaluated
T-062706-03B	TA 22	Prehistoric	Unevaluated
T-062706-04B	TA 22	Prehistoric	Unevaluated
T-062706-08B	TA 22	Prehistoric	Unevaluated
T-062706-17B	TA 22	Prehistoric	Unevaluated
T-062806-01	TA 22	Prehistoric	Unevaluated
T-062806-02	TA 22	Prehistoric	Unevaluated
T-062806-03	TA 22	Prehistoric	Unevaluated
T-062806-04	TA 22	Prehistoric	Unevaluated
T-062806-05	TA 22	Prehistoric	Unevaluated
T-062806-48B	TA 22	Prehistoric	Unevaluated
T-062906-04B	TA 22	Prehistoric	Unevaluated
T-062906-33B	TA 22	Prehistoric	Unevaluated
T-081506-04	TA 22	Prehistoric	Unevaluated
T-092304-01	TA 22	Prehistoric	Unevaluated
T-092899-01	TA 22	Prehistoric	Unevaluated
T-102501-01	TA 22	Prehistoric	Unevaluated
T-102501-02	TA 22	Prehistoric	Unevaluated
5005	TA 22	Prehistoric/Historic	Unevaluated
17138	TA 22	Unknown	Unevaluated
17155	TA 22	Unknown	Unevaluated
17163	TA 22	Unknown	Unevaluated
21319	TA 22	Unknown	Unevaluated
C-020305-01	TA 22	Unknown	Unevaluated
T-010115-01	TA 22	Unknown	Unevaluated
T-010115-02	TA 22	Unknown	Unevaluated
T-010115-05	TA 22	Unknown	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-010115-13	TA 22	Unknown	Unevaluated
T-010415-02	TA 22	Unknown	Unevaluated
T-010715-01	TA 22	Unknown	Unevaluated
T-010715-02	TA 22	Unknown	Unevaluated
T-010815-01	TA 22	Unknown	Unevaluated
T-010815-02	TA 22	Unknown	Unevaluated
T-010815-03	TA 22	Unknown	Unevaluated
T-010815-04	TA 22	Unknown	Unevaluated
T-010915-01	TA 22	Unknown	Unevaluated
T-011115-01	TA 22	Unknown	Unevaluated
T-011315-01	TA 22	Unknown	Unevaluated
T-011415-01	TA 22	Unknown	Unevaluated
T-011415-02	TA 22	Unknown	Unevaluated
T-011415-03	TA 22	Unknown	Unevaluated
T-011715-01	TA 22	Unknown	Unevaluated
T-011815-01	TA 22	Unknown	Unevaluated
T-011915-01	TA 22	Unknown	Unevaluated
T-011915-02	TA 22	Unknown	Unevaluated
T-012315-01	TA 22	Unknown	Unevaluated
T-012515-01	TA 22	Unknown	Unevaluated
T-020304-01	TA 22	Unknown	Unevaluated
T-020604-01	TA 22	Unknown	Unevaluated
T-020604-02	TA 22	Unknown	Unevaluated
T-020604-03	TA 22	Unknown	Unevaluated
T-020604-04	TA 22	Unknown	Unevaluated
T-020905-01	TA 22	Unknown	Unevaluated
T-021706-01	TA 22	Unknown	Unevaluated
T-041906-01	TA 22	Unknown	Unevaluated
T-041906-02	TA 22	Unknown	Unevaluated
T-041906-03	TA 22	Unknown	Unevaluated
T-043010-1	TA 22	Unknown	Unevaluated
T-043010-2	TA 22	Unknown	Unevaluated
T-043010-3	TA 22	Unknown	Unevaluated
T-043094-02	TA 22	Unknown	Unevaluated
T-043094-03	TA 22	Unknown	Unevaluated
T-043094-04	TA 22	Unknown	Unevaluated
T-043094-05	TA 22	Unknown	Unevaluated
T-050906-01	TA 22	Unknown	Unevaluated
T-051704-03	TA 22	Unknown	Unevaluated
T-051704-05	TA 22	Unknown	Unevaluated
T-051704-06	TA 22	Unknown	Unevaluated
T-051704-07	TA 22	Unknown	Unevaluated
T-051804-01	TA 22	Unknown	Unevaluated
T-053106-02B	TA 22	Unknown	Unevaluated
T-053106-03B	TA 22	Unknown	Unevaluated
T-053106-04B	TA 22	Unknown	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-053106-07B	TA 22	Unknown	Unevaluated
T-053106-G1	TA 22	Unknown	Unevaluated
T-053106-G2	TA 22	Unknown	Unevaluated
T-053106-G3	TA 22	Unknown	Unevaluated
T-053106-G4	TA 22	Unknown	Unevaluated
T-053106-G5	TA 22	Unknown	Unevaluated
T-060106-01B	TA 22	Unknown	Unevaluated
T-060106-11B	TA 22	Unknown	Unevaluated
T-060106-12B	TA 22	Unknown	Unevaluated
T-060106-13B	TA 22	Unknown	Unevaluated
T-060106-14B	TA 22	Unknown	Unevaluated
T-060106-15B	TA 22	Unknown	Unevaluated
T-060106-16B	TA 22	Unknown	Unevaluated
T-060106-18B	TA 22	Unknown	Unevaluated
T-060106-19B	TA 22	Unknown	Unevaluated
T-060106-20B	TA 22	Unknown	Unevaluated
T-060106-21B	TA 22	Unknown	Unevaluated
T-060106-22B	TA 22	Unknown	Unevaluated
T-060106-24B	TA 22	Unknown	Unevaluated
T-061907-01	TA 22	Unknown	Unevaluated
T-062706-01B	TA 22	Unknown	Unevaluated
T-062706-02B	TA 22	Unknown	Unevaluated
T-062706-05	TA 22	Unknown	Unevaluated
T-062706-05B	TA 22	Unknown	Unevaluated
T-062706-06	TA 22	Unknown	Unevaluated
T-062706-06B	TA 22	Unknown	Unevaluated
T-062706-07B	TA 22	Unknown	Unevaluated
T-062706-08	TA 22	Unknown	Unevaluated
T-062706-09B	TA 22	Unknown	Unevaluated
T-062706-10B	TA 22	Unknown	Unevaluated
T-062706-11B	TA 22	Unknown	Unevaluated
T-062706-12B	TA 22	Unknown	Unevaluated
T-062706-13B	TA 22	Unknown	Unevaluated
T-062706-14B	TA 22	Unknown	Unevaluated
T-062706-15B	TA 22	Unknown	Unevaluated
T-062706-16B	TA 22	Unknown	Unevaluated
T-062806-01B	TA 22	Unknown	Unevaluated
T-062806-02B	TA 22	Unknown	Unevaluated
T-062806-03B	TA 22	Unknown	Unevaluated
T-062806-04B	TA 22	Unknown	Unevaluated
T-062806-05B	TA 22	Unknown	Unevaluated
T-062806-06B	TA 22	Unknown	Unevaluated
T-062806-07B	TA 22	Unknown	Unevaluated
T-062806-08B	TA 22	Unknown	Unevaluated
T-062806-09B	TA 22	Unknown	Unevaluated
T-062806-10B	TA 22	Unknown	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-062806-11B	TA 22	Unknown	Unevaluated
T-062806-12B	TA 22	Unknown	Unevaluated
T-062806-13B	TA 22	Unknown	Unevaluated
T-062806-14B	TA 22	Unknown	Unevaluated
T-062806-15B	TA 22	Unknown	Unevaluated
T-062806-16B	TA 22	Unknown	Unevaluated
T-062806-17B	TA 22	Unknown	Unevaluated
T-062806-18B	TA 22	Unknown	Unevaluated
T-062806-19B	TA 22	Unknown	Unevaluated
T-062806-20B	TA 22	Unknown	Unevaluated
T-062806-21B	TA 22	Unknown	Unevaluated
T-062806-22B	TA 22	Unknown	Unevaluated
T-062806-23B	TA 22	Unknown	Unevaluated
T-062806-24B	TA 22	Unknown	Unevaluated
T-062806-25B	TA 22	Unknown	Unevaluated
T-062806-26B	TA 22	Unknown	Unevaluated
T-062806-27B	TA 22	Unknown	Unevaluated
T-062806-28B	TA 22	Unknown	Unevaluated
T-062806-29B	TA 22	Unknown	Unevaluated
T-062806-30B	TA 22	Unknown	Unevaluated
T-062806-31B	TA 22	Unknown	Unevaluated
T-062806-32B	TA 22	Unknown	Unevaluated
T-062806-33B	TA 22	Unknown	Unevaluated
T-062806-34B	TA 22	Unknown	Unevaluated
T-062806-35B	TA 22	Unknown	Unevaluated
T-062806-36B	TA 22	Unknown	Unevaluated
T-062806-37B	TA 22	Unknown	Unevaluated
T-062806-38B	TA 22	Unknown	Unevaluated
T-062806-39B	TA 22	Unknown	Unevaluated
T-062806-40B	TA 22	Unknown	Unevaluated
T-062806-41B	TA 22	Unknown	Unevaluated
T-062806-42B	TA 22	Unknown	Unevaluated
T-062806-43B	TA 22	Unknown	Unevaluated
T-062806-44B	TA 22	Unknown	Unevaluated
T-062806-45B	TA 22	Unknown	Unevaluated
T-062806-46B	TA 22	Unknown	Unevaluated
T-062806-47B	TA 22	Unknown	Unevaluated
T-062806-49B	TA 22	Unknown	Unevaluated
T-062906-01B	TA 22	Unknown	Unevaluated
T-062906-02B	TA 22	Unknown	Unevaluated
T-062906-03B	TA 22	Unknown	Unevaluated
T-062906-05B	TA 22	Unknown	Unevaluated
T-062906-06B	TA 22	Unknown	Unevaluated
T-062906-07B	TA 22	Unknown	Unevaluated
T-062906-08B	TA 22	Unknown	Unevaluated
T-062906-09B	TA 22	Unknown	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-062906-10B	TA 22	Unknown	Unevaluated
T-062906-11B	TA 22	Unknown	Unevaluated
T-062906-12B	TA 22	Unknown	Unevaluated
T-062906-13B	TA 22	Unknown	Unevaluated
T-062906-14B	TA 22	Unknown	Unevaluated
T-062906-15B	TA 22	Unknown	Unevaluated
T-062906-16B	TA 22	Unknown	Unevaluated
T-062906-17B	TA 22	Unknown	Unevaluated
T-062906-18B	TA 22	Unknown	Unevaluated
T-062906-19B	TA 22	Unknown	Unevaluated
T-062906-20B	TA 22	Unknown	Unevaluated
T-062906-21B	TA 22	Unknown	Unevaluated
T-062906-22B	TA 22	Unknown	Unevaluated
T-062906-23B	TA 22	Unknown	Unevaluated
T-062906-24B	TA 22	Unknown	Unevaluated
T-062906-25B	TA 22	Unknown	Unevaluated
T-062906-26B	TA 22	Unknown	Unevaluated
T-062906-27B	TA 22	Unknown	Unevaluated
T-062906-28B	TA 22	Unknown	Unevaluated
T-062906-29B	TA 22	Unknown	Unevaluated
T-062906-30B	TA 22	Unknown	Unevaluated
T-062906-31B	TA 22	Unknown	Unevaluated
T-062906-32B	TA 22	Unknown	Unevaluated
T-062906-34B	TA 22	Unknown	Unevaluated
T-062906-35B	TA 22	Unknown	Unevaluated
T-062906-36B	TA 22	Unknown	Unevaluated
T-062906-37B	TA 22	Unknown	Unevaluated
T-062906-38B	TA 22	Unknown	Unevaluated
T-062906-39B	TA 22	Unknown	Unevaluated
T-062906-40B	TA 22	Unknown	Unevaluated
T-062906-41B	TA 22	Unknown	Unevaluated
T-062906-42B	TA 22	Unknown	Unevaluated
T-062906-43B	TA 22	Unknown	Unevaluated
T-062906-44B	TA 22	Unknown	Unevaluated
T-062906-45B	TA 22	Unknown	Unevaluated
T-062906-46B	TA 22	Unknown	Unevaluated
T-062906-47B	TA 22	Unknown	Unevaluated
T-062906-47B	TA 22	Unknown	Unevaluated
T-063006-02B	TA 22	Unknown	Unevaluated
T-071306-01	TA 22	Unknown	Unevaluated
T-081406-01	TA 22	Unknown	Unevaluated
T-081406-02	TA 22	Unknown	Unevaluated
T-081406-03	TA 22	Unknown	Unevaluated
T-081406-04	TA 22	Unknown	Unevaluated
T-081406-05	TA 22	Unknown	Unevaluated
T-081506-03	TA 22	Unknown	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-082306-01	TA 22	Unknown	Unevaluated
T-082306-02	TA 22	Unknown	Unevaluated
T-082306-03	TA 22	Unknown	Unevaluated
T-082306-04	TA 22	Unknown	Unevaluated
T-082306-05	TA 22	Unknown	Unevaluated
T-082411-01	TA 22	Unknown	Unevaluated
T-082412-01	TA 22	Unknown	Unevaluated
T-092210-02	TA 22	Unknown	Unevaluated
T-100606-01	TA 22	Unknown	Unevaluated
T-100606-02	TA 22	Unknown	Unevaluated
T-102808-02	TA 22	Unknown	Unevaluated
T-111912-02	TA 22	Unknown	Unevaluated
T-111912-03	TA 22	Unknown	Unevaluated
T-111914-01	TA 22	Unknown	Unevaluated
T-112012-01	TA 22	Unknown	Unevaluated
T-112014-01	TA 22	Unknown	Unevaluated
T-112014-02	TA 22	Unknown	Unevaluated
T-112112-02	TA 22	Unknown	Unevaluated
T-112112-03	TA 22	Unknown	Unevaluated
T-112112-04	TA 22	Unknown	Unevaluated
T-112912-01	TA 22	Unknown	Unevaluated
T-112912-02A	TA 22	Unknown	Unevaluated
T-112912-02B	TA 22	Unknown	Unevaluated
T-112912-03	TA 22	Unknown	Unevaluated
T-113006-01	TA 22	Unknown	Unevaluated
T-121312-01	TA 22	Unknown	Unevaluated
TL-041910-01	TA 22	Unknown	Unevaluated
TL-042010-01	TA 22	Unknown	Unevaluated
TL-042010-02	TA 22	Unknown	Unevaluated
TL-042010-03	TA 22	Unknown	Unevaluated
TL-042110-01	TA 22	Unknown	Unevaluated
TL-042110-02	TA 22	Unknown	Unevaluated
TL-042110-03	TA 22	Unknown	Unevaluated
TL-042110-04	TA 22	Unknown	Unevaluated
TL-042110-05	TA 22	Unknown	Unevaluated
TL-042110-06	TA 22	Unknown	Unevaluated
TL-042110-07	TA 22	Unknown	Unevaluated
TL-042910-01	TA 22	Unknown	Unevaluated
TL-042910-02	TA 22	Unknown	Unevaluated
TL-042910-03	TA 22	Unknown	Unevaluated
TL-042910-04	TA 22	Unknown	Unevaluated
TL-042910-05	TA 22	Unknown	Unevaluated
TL-042910-06	TA 22	Unknown	Unevaluated
TL-042910-07	TA 22	Unknown	Unevaluated
10269	TA 23	Prehistoric	Eligible
10644	TA 23	Prehistoric	Eligible

Site ID	Location	Age Affiliation	NRHP Status
10645	TA 23	Prehistoric	Eligible
10646	TA 23	Prehistoric	Eligible
10647	TA 23	Prehistoric	Eligible
10648	TA 23	Prehistoric	Eligible
10649	TA 23	Prehistoric	Eligible
10650	TA 23	Prehistoric	Eligible
10651	TA 23	Prehistoric	Eligible
10652	TA 23	Prehistoric	Eligible
10653	TA 23	Prehistoric	Eligible
10654	TA 23	Prehistoric	Eligible
10655	TA 23	Prehistoric	Eligible
10656	TA 23	Prehistoric	Eligible
10657	TA 23	Prehistoric	Eligible
10658	TA 23	Prehistoric	Eligible
10220	TA 23	Prehistoric	Unevaluated
10266	TA 23	Prehistoric	Unevaluated
10267	TA 23	Prehistoric	Unevaluated
10268	TA 23	Prehistoric	Unevaluated
10270	TA 23	Prehistoric	Unevaluated
10271	TA 23	Prehistoric	Unevaluated
10272	TA 23	Prehistoric	Unevaluated
17119	TA 23	Prehistoric	Unevaluated
17120	TA 23	Prehistoric	Unevaluated
17121	TA 23	Prehistoric	Unevaluated
17122	TA 23	Prehistoric	Unevaluated
17123	TA 23	Prehistoric	Unevaluated
17125	TA 23	Prehistoric	Unevaluated
17126	TA 23	Prehistoric	Unevaluated
17140	TA 23	Prehistoric	Unevaluated
17143	TA 23	Prehistoric	Unevaluated
17144	TA 23	Prehistoric	Unevaluated
17145	TA 23	Prehistoric	Unevaluated
17158	TA 23	Prehistoric	Unevaluated
21747	TA 23	Prehistoric	Unevaluated
21748	TA 23	Prehistoric	Unevaluated
21749	TA 23	Prehistoric	Unevaluated
T-010705-01	TA 23	Prehistoric	Unevaluated
T-020402-04	TA 23	Prehistoric	Unevaluated
T-020402-05	TA 23	Prehistoric	Unevaluated
T-051502-01	TA 23	Prehistoric	Unevaluated
T-051502-02	TA 23	Prehistoric	Unevaluated
T-051502-03	TA 23	Prehistoric	Unevaluated
T-051504-01	TA 23	Prehistoric	Unevaluated
T-082984-01	TA 23	Prehistoric	Unevaluated
T-091102-01	TA 23	Prehistoric	Unevaluated
T-091102-02	TA 23	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
T-091102-03	TA 23	Prehistoric	Unevaluated
T-122805-01	TA 23	Prehistoric	Unevaluated
17139	TA 23	Prehistoric, Historic	Unevaluated
23847	TA 3	Historic	Unevaluated
23854	TA 3	Prehistoric	Unevaluated
23856	TA 3	Prehistoric	Unevaluated
T-092202-01	TA 3	Prehistoric	Unevaluated
T-092202-02	TA 3	Prehistoric	Unevaluated
T-092202-03	TA 3	Prehistoric	Unevaluated
T-092202-04	TA 3	Prehistoric	Unevaluated
T-092202-05	TA 3	Prehistoric	Unevaluated
T-111402-01	TA 3	Prehistoric	Unevaluated
T-111402-02	TA 3	Prehistoric	Unevaluated
T-111402-05	TA 3	Prehistoric	Unevaluated
T-111402-06	TA 3	Prehistoric	Unevaluated
23848	TA 3	Unknown	Unevaluated
23850	TA 4	Historic	Unevaluated
23852	TA 4	Historic	Unevaluated
22941	TA 4	Prehistoric	Unevaluated
21746	TA 4	Unknown	Unevaluated
23849	TA 4	Unknown	Unevaluated
23851	TA 4	Unknown	Unevaluated
23853	TA 4	Unknown	Unevaluated
5002	TA 5	Historic	Eligible
14638	TA 5	Prehistoric	Eligible
19490	TA 5	Prehistoric	Eligible
21351	TA 5	Prehistoric	Unevaluated
21744	TA 5	Prehistoric	Unevaluated
21745	TA 5	Prehistoric	Unevaluated
23455	TA 5	Prehistoric	Unevaluated
23456	TA 5	Prehistoric	Unevaluated
23562	TA 5	Prehistoric	Unevaluated
23563	TA 5	Prehistoric	Unevaluated
23565	TA 5	Prehistoric	Unevaluated
23566	TA 5	Prehistoric	Unevaluated
23568	TA 5	Prehistoric	Unevaluated
23569	TA 5	Prehistoric	Unevaluated
23570	TA 5	Prehistoric	Unevaluated
23571	TA 5	Prehistoric	Unevaluated
23572	TA 5	Prehistoric	Unevaluated
23575	TA 5	Prehistoric	Unevaluated
26728	TA 5	Prehistoric	Unevaluated
26729	TA 5	Prehistoric	Unevaluated
T-070104-01	TA 5	Prehistoric	Unevaluated
5003	TA 6	Prehistoric	Eligible
T-020701-02	TA 6	Prehistoric	Unevaluated

Site ID	Location	Age Affiliation	NRHP Status
5001	TA 6?	Prehistoric	Unevaluated
23457	TA 7	Prehistoric	Eligible
23462	TA 7	Unknown	Not Eligible
24326	TA 7	Unknown	Not Eligible
24327	TA 7	Unknown	Not Eligible
24328	TA 7	Unknown	Not Eligible

APPENDIX D.2: USAG-Pōhakuloa Historic Facilities with an Active Historic Status Code

USAG-P Facilities 1901-1967

Real Property Planning and Analysis System (RPLANS)

Headquarters Installation Information System (HQIIS) physical_legal report, 20-December-2016

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Kilauea Mil Reserve	10	1-Jul-23	1-Jul-23	-	Building	FEE	NREC
Kilauea Mil Reserve	11	1-Jul-23	1-Jul-23	-	Building	FEE	NREC
Kilauea Mil Reserve	12	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	14	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	15	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	16	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	17	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	18	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	7	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	A0012	1-Jul-24	1-Jul-24	-	Building	FEE	NREC
Kilauea Mil Reserve	2	1-Jul-25	1-Jul-25	-	Building	FEE	NREC
Kilauea Mil Reserve	3	1-Jul-25	1-Jul-25	-	Building	FEE	NREC
Kilauea Mil Reserve	4	1-Jul-25	1-Jul-25	-	Building	FEE	NREC
Kilauea Mil Reserve	5	1-Jul-25	1-Jul-25	-	Building	FEE	NREC
Kilauea Mil Reserve	6	1-Jul-25	1-Jul-25	-	Building	FEE	NREC
Kilauea Mil Reserve	19	1-Jul-26	1-Jul-26	-	Building	FEE	NREC
Kilauea Mil Reserve	20	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	25	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	27	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	28	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	29	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	30	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	31	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	32	1-Jul-33	1-Jul-33	-	Building	FEE	NREC
Kilauea Mil Reserve	9	1-Jul-34	1-Jul-34	-	Building	FEE	NREC
Kilauea Mil Reserve	41	1-Jul-36	1-Jul-36	-	Building	FEE	NREC
Kilauea Mil Reserve	89	1-Jul-36	1-Jul-36	-	Building	FEE	NREC
Kilauea Mil Reserve	36	1-Jul-38	1-Jul-38	-	Building	FEE	NREC
Kilauea Mil Reserve	38	1-Jul-38	1-Jul-38	-	Building	FEE	NREC
Kilauea Mil Reserve	8	1-Jul-38	1-Jul-38	-	Building	FEE	NREC
Kilauea Mil Reserve	26	1-Jul-39	1-Jul-39	-	Building	FEE	NREC
Kilauea Mil Reserve	42	1-Jul-40	1-Jul-40	-	Building	FEE	NREC
Kilauea Mil Reserve	43	1-Jul-42	1-Jul-42	-	Building	FEE	NREC
Kilauea Mil Reserve	40	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	46	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	47	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	48	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	51	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	55	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	63	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	72	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	73	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	74	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	76	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	77	1-Jul-44	1-Jul-44	-	Building	FEE	NREC
Kilauea Mil Reserve	67	1-Jul-44	1-Jul-44	-	Building	FEE	NREI
Kilauea Mil Reserve	22	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	24	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	45	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	62	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	64	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	65	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	66	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	86	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	88	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	90	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	91	1-Jul-45	1-Jul-45	-	Building	FEE	NREC
Kilauea Mil Reserve	21	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	23	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	33	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	34	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	35	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	37	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	39	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	79	1-Jul-46	1-Jul-46	-	Building	PRIV	NREC
Kilauea Mil Reserve	82	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	84	1-Jul-46	1-Jul-46	-	Structure	FEE	NREC
Kilauea Mil Reserve	92	1-Jul-46	1-Jul-46	-	Building	FEE	NREC
Kilauea Mil Reserve	83	1-Jul-46	1-Jul-46	-	Building	FEE	NREI
Kilauea Mil Reserve	85	1-Jul-47	1-Jul-47	-	Building	FEE	NREC
Kilauea Mil Reserve	94	1-Jul-47	1-Jul-47	-	Building	FEE	NREC

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Kilauea Mil Reserve	95	1-Jul-47	1-Jul-47	-	Building	FEE	NREC
Kilauea Mil Reserve	96	1-Jul-47	1-Jul-47	-	Building	FEE	NREC
Kilauea Mil Reserve	97	1-Jul-47	1-Jul-47	-	Building	FEE	NREC
Kilauea Mil Reserve	98	1-Jul-47	1-Jul-47	-	Building	FEE	NREC
Kilauea Mil Reserve	99	1-Jul-47	1-Jul-47	-	Building	FEE	NREC
Kilauea Mil Reserve	81	1-Jul-66	1-Jul-66	-	Building	FEE	NREC
Pohakuloa Training Area	113	1-Jul-55	1-Jul-55	-	Building	FEE	ELPA
Pohakuloa Training Area	122	1-Jul-55	1-Jul-55	-	Building	FEE	ELPA
Pohakuloa Training Area	131	1-Jul-55	1-Jul-55	-	Building	FEE	ELPA
Pohakuloa Training Area	142	1-Jul-55	1-Jul-55	-	Building	FEE	ELPA
Pohakuloa Training Area	185	1-Jul-55	1-Jul-55	-	Building	FEE	ELPA
Pohakuloa Training Area	186	1-Jul-55	1-Jul-55	-	Building	FEE	ELPA
Pohakuloa Training Area	190	1-Jul-56	1-Jul-56	-	Building	FEE	ELPA
Pohakuloa Training Area	104	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	107	1-Jul-57	1-Jul-57	RANGE SUPPORT BUILDING	Building	FEE	ELPA
Pohakuloa Training Area	112	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	115	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	116	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	117	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	118	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	119	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	124	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	125	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	126	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	127	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	128	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	135	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	136	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	137	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	138	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	139	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	144	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	145	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	146	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	147	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	148	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	181	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	182	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	187	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	197	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	198	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	199	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	200	1-Jul-57	1-Jul-57	-	Building	FEE	ELPA
Pohakuloa Training Area	0113A	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	0131A	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	196	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	221	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	222	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	223	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	224	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	231	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	232	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	233	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	234	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	235	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	236	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	241	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	242	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	243	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	244	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	245	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	246	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	251	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	252	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	254	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	255	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	256	1-Jul-58	1-Jul-58	-	Building	FEE	ELPA
Pohakuloa Training Area	225	1-Jul-59	1-Jul-59	-	Building	FEE	ELPA
Pohakuloa Training Area	220	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA
Pohakuloa Training Area	270	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA
Pohakuloa Training Area	271	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA
Pohakuloa Training Area	272	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA
Pohakuloa Training Area	273	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA
Pohakuloa Training Area	274	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA
Pohakuloa Training Area	275	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA
Pohakuloa Training Area	276	1-Jul-61	1-Jul-61	-	Building	FEE	ELPA

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Pohakuloa Training Area	195	1-Jul-62	1-Jul-62	-	Building	FEE	ELPA
Pohakuloa Training Area	280	1-Jul-62	1-Jul-62	-	Building	FEE	ELPA
Pohakuloa Training Area	284	1-Jul-64	1-Jul-64	-	Building	FEE	ELPA

APPENDIX D.3: USAG-Pōhakuloa Historic Facilities in Need of Evaluation

USAG-P Facilities 1901-1967
Real Property Planning and Analysis System (RPLANS)

Headquarters Installation Information System (HQIS) physical_legal report, 20-December-2016

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Kilauea Mil Reserve	201	1-Jul-36	1-Jul-36	-	Structure	PRIV	NEV
Kilauea Mil Reserve	202	1-Jul-36	1-Jul-36	-	Structure	PRIV	NEV
Kilauea Mil Reserve	219	1-Jul-36	1-Jul-36	-	Structure	PRIV	NEV
Kilauea Mil Reserve	226	1-Jul-36	1-Jul-36	-	Structure	PRIV	NEV
Kilauea Mil Reserve	203	1-Jul-37	1-Jul-37	-	Structure	PRIV	NEV
Kilauea Mil Reserve	104	1-Jul-38	1-Jul-38	-	Structure	FEE	NEV
Kilauea Mil Reserve	106	1-Jul-38	1-Jul-38	-	Structure	FEE	NEV
Kilauea Mil Reserve	211	1-Jul-38	1-Jul-38	-	Structure	PRIV	NEV
Kilauea Mil Reserve	A0036	1-Jul-38	1-Jul-38	-	Building	FEE	NEV
Kilauea Mil Reserve	85210	1-Jul-40	1-Jul-40	-	Structure	FEE	NEV
Kilauea Mil Reserve	87210	1-Jul-40	1-Jul-40	-	Structure	FEE	NEV
Kilauea Mil Reserve	A0040	1-Jul-40	1-Jul-40	-	Structure	FEE	NEV
Kilauea Mil Reserve	224	1-Jul-41	1-Jul-41	-	Structure	PRIV	NEV
Kilauea Mil Reserve	85220	1-Jul-43	1-Jul-43	-	Structure	FEE	NEV
Kilauea Mil Reserve	45210	1-Jul-44	1-Jul-44	-	Structure	FEE	NEV
Kilauea Mil Reserve	68	1-Jul-44	1-Jul-44	-	Building	FEE	NEV
Kilauea Mil Reserve	70	1-Jul-44	1-Jul-44	-	Building	FEE	NEV
Kilauea Mil Reserve	71	1-Jul-44	1-Jul-44	-	Building	FEE	NEV
Kilauea Mil Reserve	78	1-Jul-45	1-Jul-45	-	Building	PRIV	NEV
Kilauea Mil Reserve	89240	1-Jul-45	1-Jul-45	-	Structure	PRIV	NEV
Kilauea Mil Reserve	225	1-Jul-46	1-Jul-46	-	Structure	PRIV	NEV
Kilauea Mil Reserve	A0085	1-Jul-46	1-Jul-46	-	Building	FEE	NEV
Kilauea Mil Reserve	100	1-Jul-47	1-Jul-47	-	Building	FEE	NEV
Kilauea Mil Reserve	107	1-Jul-47	1-Jul-47	-	Structure	FEE	NEV
Kilauea Mil Reserve	80	1-Jul-47	1-Jul-47	-	Building	FEE	NEV
Kilauea Mil Reserve	81230	1-Jul-47	1-Jul-47	-	Structure	FEE	NEV
Kilauea Mil Reserve	A0080	1-Jul-53	1-Jul-53	-	Building	FEE	NEV
Kilauea Mil Reserve	81260	1-Jul-57	1-Jul-57	-	Structure	FEE	NEV
Kilauea Mil Reserve	93	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Kilauea Mil Reserve	59	1-Jul-62	1-Jul-62	-	Building	FEE	NEV
Kilauea Mil Reserve	217	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Kilauea Mil Reserve	218	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Kilauea Mil Reserve	A0211	1-Jul-65	1-Jul-65	-	Structure	PRIV	NEV
Kilauea Mil Reserve	B0080	1-Jul-66	1-Jul-66	-	Building	PRIV	NEV
Pohakuloa Training Area	LFIL1	1-Jan-55	1-Jan-55	-	Structure	FEE	NEV
Pohakuloa Training Area	1	1-Jul-55	1-Jul-55	ACCESS CONTROL FACILITY	Building	FEE	NEV
Pohakuloa Training Area	109	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Pohakuloa Training Area	110	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Pohakuloa Training Area	184	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Pohakuloa Training Area	20	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Pohakuloa Training Area	400	1-Jul-55	1-Jul-55	-	Structure	PRIV	NEV
Pohakuloa Training Area	401	1-Jul-55	1-Jul-55	-	Structure	PRIV	NEV
Pohakuloa Training Area	402	1-Jul-55	1-Jul-55	-	Structure	PRIV	NEV
Pohakuloa Training Area	75	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Pohakuloa Training Area	91	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Pohakuloa Training Area	93	1-Jul-55	1-Jul-55	-	Building	FEE	NEV
Pohakuloa Training Area	101	1-Jul-56	1-Jul-56	-	Structure	FEE	NEV
Pohakuloa Training Area	177	1-Jul-56	1-Jul-56	-	Building	FEE	NEV
Pohakuloa Training Area	180	1-Jul-56	1-Jul-56	-	Building	FEE	NEV
Pohakuloa Training Area	83	1-Jul-56	1-Jul-56	-	Building	FEE	NEV
Pohakuloa Training Area	84	1-Jul-56	1-Jul-56	-	Building	FEE	NEV
Pohakuloa Training Area	85	1-Jul-56	1-Jul-56	-	Building	FEE	NEV
Pohakuloa Training Area	90	1-Jul-56	1-Jul-56	-	Building	FEE	NEV
Pohakuloa Training Area	0179A	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	106	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	108	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	120	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	129	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	140	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	149	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	17	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	179	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	188	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	19	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	30	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	31	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	32	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	33	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	34	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	35	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	36	1-Jul-57	1-Jul-57	-	Building	FEE	NEV

SITE NAME	FACILITY NUMBER	FACILITY BUILT DATE	ACQUISITION DATE	RPA NAME	RPA TYPE DESC	INTEREST TYPE CODE	HISTORIC STATUS CODE
Pohakuloa Training Area	37	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	81260	1-Jul-57	1-Jul-57	-	Structure	FEE	NEV
Pohakuloa Training Area	87	1-Jul-57	1-Jul-57	-	Building	FEE	NEV
Pohakuloa Training Area	89240	1-Jul-57	1-Jul-57	-	Structure	PRIV	NEV
Pohakuloa Training Area	11110	1-Jul-58	1-Jul-58	-	Structure	FEE	NEV
Pohakuloa Training Area	1132A	1-Jul-58	1-Jul-58	-	Structure	FEE	NEV
Pohakuloa Training Area	1132B	1-Jul-58	1-Jul-58	-	Structure	FEE	NEV
Pohakuloa Training Area	1132C	1-Jul-58	1-Jul-58	-	Structure	FEE	NEV
Pohakuloa Training Area	161	1-Jul-58	1-Jul-58	-	Structure	FEE	NEV
Pohakuloa Training Area	253	1-Jul-58	1-Jul-58	-	Building	FEE	NEV
Pohakuloa Training Area	302	1-Jul-58	1-Jul-58	-	Building	FEE	NEV
Pohakuloa Training Area	82	1-Jul-58	1-Jul-58	-	Building	FEE	NEV
Pohakuloa Training Area	11212	1-Jul-59	1-Jul-59	-	Structure	FEE	NEV
Pohakuloa Training Area	237	1-Jul-61	1-Jul-61	-	Building	FEE	NEV
Pohakuloa Training Area	250	1-Jul-61	1-Jul-61	-	Building	FEE	NEV
Pohakuloa Training Area	285	1-Jul-61	1-Jul-61	-	Building	FEE	NEV
Pohakuloa Training Area	286	1-Jul-61	1-Jul-61	-	Building	FEE	NEV
Pohakuloa Training Area	103	1-Jul-62	1-Jul-62	-	Building	FEE	NEV
Pohakuloa Training Area	0004Z	1-Jul-64	7-Dec-11	GREASE RACK	Structure	FEE	NEV
Pohakuloa Training Area	105	1-Jul-64	1-Jul-64	-	Structure	FEE	NEV
Pohakuloa Training Area	141	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Pohakuloa Training Area	283	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Pohakuloa Training Area	350	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Pohakuloa Training Area	38	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Pohakuloa Training Area	41	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Pohakuloa Training Area	92	1-Jul-64	1-Jul-64	-	Building	FEE	NEV
Pohakuloa Training Area	351	1-Jul-65	1-Jul-65	-	Building	FEE	NEV