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May 25, 1999

(FDC) QUALITY

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Finding of No Significant Impact (FONSI),
Establishment of the Regional Training Institute
Complex, Hawaii Army National Guard, 298th
Regiment, Bellows Air Force Station, Waimanalo,
Oahu, Hawaii

The State Department of Defense reviewed the comments received during the 30-day public comment period that began December 23, 1998. This agency determined that this project will not have any significant environmental impacts. Therefore, we are issuing a FONSI for publication in the June 8, 1999, OEQC Environmental Notice.

The OEQC Publication Form, the FONSI, and four copies of the final Environmental Assessment are enclosed. Please use the original project summary from the December 23, 1998, OEQC Environmental Notice.

If there are any questions, please have your staff contact Lieutenant Colonel Ron Swafford, Environmental Protection Specialist, at 733-4214.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed V. Richardson".

Edward V. Richardson
Major General
Hawaii Air National Guard
Adjutant General

Enc. (3)



1999-06-08-0A-FEA - Bellows AFS Regional
Training Complex

JUN 8 1999

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**FINAL
ENVIRONMENTAL ASSESSMENT**

**ESTABLISHMENT OF
THE REGIONAL TRAINING INSTITUTE COMPLEX
HAWAII ARMY NATIONAL GUARD
298TH REGIMENT, BELLOWS AIR FORCE STATION
WAIMANALO, OAHU, HAWAII**

**Prepared for the
National Guard Bureau and the
State of Hawaii Department of Defense
by the Facilities Management Office
Hawaii Army National Guard**

March 1999

LEAD AGENCY: National Guard Bureau

TITLE OF PROPOSED ACTION: Establishment of the Regional Training Institute Complex, Bellows Air Force Station, Waimanalo, Hawaii

AFFECTED JURISDICTION: State of Hawaii

POINT OF CONTACT: Captain Charles Anthony, State of Hawaii
Department of Defense, Public Affairs and Education Officer,
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PROPOSERS: Hawaii Army National Guard and Hawaii Department of Defense

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DOCUMENT DESIGNATION: Environmental Assessment

ABSTRACT: This Environmental Assessment (EA) evaluates the potential environmental impacts that may result from the proposed establishment of the 298th Regimental Regional Training Institute (RTI) at Bellows Air Force Station (BAFS), on Oahu in Hawaii. The evaluation also includes potential impacts of the No Action alternative and those of two other alternatives.

The Hawaii Army National Guard (HIARNG) is preparing this EA pursuant to the National Environmental Policy Act (NEPA) of 1969 and Hawaii Revised Statutes, Chapter 343, Environmental Impact Statements. Title 40, Code of Federal Regulations, Parts 1500-1508, implements NEPA, while Title 11, Chapter 200, Hawaii Administrative Rules, implements State EIS law.

The proposed action establishes a 48-acre RTI site at BAFS. Based on the data and analysis in this EA, the Adjutant General of the HIARNG as the preparer, and the Deputy Director of the Army National Guard Bureau as the approver, will issue either a Finding of No Significant Impact or A Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS).

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SECTION 1.0
PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 Introduction. The proposed action is to establish a new complex for the 298th Regiment Regional Training Institute (RTI) on 48 acres of unused land at Bellows Air Force Station (BAFS) (Figure 1). The current HIARNG RTI lies within BAFS on a 170-acre parcel that was previously property of the Hawaiian Republic. By law, the Air Force must return this 170-acre parcel of ceded land to the State of Hawaii, forcing the HIARNG to vacate the current RTI. The Navy's *Environmental Impact Statement, Land Use and Development Plan, Bellows Air Force Station, Waimanalo, Hawaii*, describes the ceded land issue in detail (Belt Collins Hawaii, 1995). To replace the existing RTI, the HIARNG proposes to construct a new RTI in the former Communications area at BAFS. The Navy's 1995 Land Use EIS considered several development options at BAFS, including the construction of a permanent HIARNG facility in the Communications area. This document provides a detailed environmental assessment of the proposed RTI Complex.

1.2 Purpose and Need. The HIARNG proposes to construct a facility for the RTI. The RTI provides training for soldiers from the Pacific area. There are four major categories of training: Officer Candidate School, Noncommissioned Officers Education System, Non-prior Service Training Program, and Military Occupational Specialty Qualification. The courses emphasize task-oriented training. The RTI is an integral part of the HIARNG and is essential to the total Army training system. The RTI cannot fulfill its mission without a facility in which to operate.

1.3 Scope of the Document. This EA identifies the actions, alternatives, criteria, sites, and resources involved in answering the need to develop a permanent complex for the RTI. Preliminary actions included: developing criteria, searching for alternatives, evaluating alternatives, identifying resources, evaluating impacts on resources, and selection of the preferred criteria.

SECTION 2.0
DESCRIPTION OF THE PROPOSED ACTION

The HIARNG proposes to build a new RTI facility on 48 acres licensed from the U.S. Air Force 15th Air Base Wing. This acreage is in the former Communications area. Development of the

new administration and education facility would proceed after receiving the license.

The development plan is now in the conceptual stage (Figure 2). The proposed project consists of three phases. The first phase includes the construction of an administration and education facility, with dining, parking, sidewalk, and access road. The second phase would provide billets and a multi-purpose building and physical fitness area. The third phase of development would provide additional recreational areas. The HIARNG would provide these areas for community use when not required for National Guard training. To reserve recreational facilities, community members would have to submit a written request to the Adjutant General of the HIARNG.

SECTION 3.0 ALTERNATIVES CONSIDERED

This EA identifies a subset of all alternatives, which appear best to achieve the stated purpose and need for the environmental consequences. Reference Section 3.2 for the description of alternatives.

This section describes and identifies the criteria and alternatives for developing the new RTI complex. Preliminary alternatives include: (1) use the existing complex on BAFS with the addition of Building 700; (2) build a new complex on BAFS at the southwest corner of the Communications area; (3) move to Barbers Point and build a new facility; (4) use Buildings 700 and 701 in the middle of the Communications area at BAFS; (5) new construction on a neighbor island; (6) new construction elsewhere on Oahu or BAFS. Of the above choices, this draft EA considers three alternatives. The preferred alternative is (2) to build a new complex on BAFS at the southwest corner of the Communications area.

3.1 Alternatives Development. The identification of alternatives included development of the following screening criteria:

- Cost (due consideration to value regarding other criteria).
- A permanent facility.
- Available lands (minimum 30 acres, outside Conservation District zone, near public highway/roadway).
- Buildings suitable for administration, classrooms, dining and dormitory functions.

- Grounds for outdoor training and recreation facilities.
- A facility suitable for the training of 1,200 soldiers per year, plus staff.
- Continuing HIARNG troop presence in Waimanalo since establishment on BAFS in 1959. HIARNG's role at Bellows changed with the transition from NIKE missile ground/air defense site to Hawaii Military Academy (HMA) to RTI.
- The RTI is best located on Oahu to maximize time and minimize the cost to administer the program.
- Construction of a new facility must not violate any Federal environmental laws, including the Endangered Species Act, National Historic Preservation Act, Native American Graves Repatriation Act, Clean Air Act, Clean Water Act, Coastal Zone Management Act, Resource Conservation and Recovery Act, and Public Law 90-480 (Accessibility Designed for the Physically Handicapped). Executive Orders (EO) 11752, 11988, 12898 and 13045 are applicable. Hawaii State laws to be considered include the Environmental Impact Statement (HRS 343), State Plan (HRS 244), Land Use (HRS 205), Conservation and Resources (HRS Title 12), and Historic Preservation (HRS Chapter 6E). City and County ordinances require the consideration of General Planning and Land Use (zoning).

3.2 Alternatives to the Proposed Action

Alternative (1), Another Site on BAFS. Analyzed for use, buildings 700 and 701, also on the Communications area, were not very cost-effective.

Alternative (2), The Preferred Alternative. The preferred alternative is to establish a new complex including the construction of new buildings on unused land at BAFS in the former Communications area (Figure 2). The Department of Defense (DOD) Joint Facilities Board validated the proposal for unilateral action. Discussion of the preferred alternative is in the following pages.

Alternative (3), Another Site on Oahu (Barbers Point). The HIARNG planners considered an alternative at Barbers Point for a suitable site, but rearranging present plans were more expensive. The 48 acres required for the RTI complex would be difficult to obtain at Barbers Point, and would require a change of plans for the units currently scheduled to move there. Furthermore, additional lands are not available.

3.3 No Action Alternative (4). The Air Force (AF) designated the present site as excess to the U.S. DOD. Currently the RTI uses three buildings totaling 10,348 square feet to conduct their mission. The U.S. AF must return these excess lands to the state of Hawaii in accordance with Federal laws and the Hawaii Military Land Use Plan. Inadequate space allocation would seriously impair HIARNG's ability to meet missions essential tasking to train approximately 1,200 soldiers per year.

SECTION 4.0 AFFECTED ENVIRONMENT

4.1 Location. The proposed location lies about 20 degrees 20" north latitude and 157 degrees 55" west latitude on the island of Oahu in Waimanalo. Bellows occupies about 1,500 acres on the coastal plain of eastern Oahu between the steep cliffs (*pali*) of the Ko'olau Mountains and Waimanalo Bay of the Pacific Ocean. This area is identified by Honolulu Tax Map Key 4-1-15:1; is in the State Land Use Urban District; and, is zoned Federal-1 by the City and County of Honolulu. This description covers the preferred alternative and the no action alternative.

The 48-acre parcel under consideration occupies the southwest portion of BAFS, on the former Communications parcel. It lies about two-thirds of a mile from the current site. The site is level, and encompasses the southwest portion of the inactive runways 3L and 6R, including a wedge of land within a cyclone fenced security area. The *pali* (cliffs) of the Ko'olau Range form a dramatic backdrop to the location. The ocean is not visible from the parcel due to its inland location. Heavy overgrowth and the Waimanalo Shopping Center block the Kalaniana'ole Highway from view.

4.2 Land Use. BAFS is located in the *ahupua'a* (traditional socio-political land unit extending from the ocean to the ridge top) of Waimanalo. It has been hypothesized that the immediate back beach dune area on this coast contains one of the earliest settlements in Hawaii, with an approximate date of 800-900 AD. Native Hawaiians grew irrigated taro and sweet potato, and used coastal resources from streams, fishponds, and offshore waters. A place of refuge (*pu'uhonua*) may have been located near the former Nike site; however, no archaeological remains of prehistoric structures or monumental architecture have been recorded at the Nike site (Tuggle, 1997).

Although Oahu represents less than ten percent of the state's total land area, about four-fifths of Hawaii's population live on

the island of Oahu. Sugar cane crops have been an important land use on windward lowlands, while military use occupies other large parcels. Residential use continues to increase near BAFS, including the construction of Olomana Golf Course, the Keola Hills subdivision, and other developments near Waimanalo Beach and Lanikai.

The site of the proposed project lies in the Urban Land Use District of the State, and within the Federal land use zone for the City and County. The construction of the proposed RTI facility will not change the land use zoning.

Climate. The state of Hawaii lies in the tropics, with a relatively uniform climate throughout the year. The location has a reasonably constant length of day, solar energy, and temperature. Mild temperatures exist throughout the year, with average daily maximum and minimum temperatures at BAFS ranging from 64.8 to 89.4 degrees Fahrenheit. Annual rainfall is approximately 40 inches per year at BAFS, which lies on the windward side of the Ko'olau mountains. The prevailing winds are east-northeasterly trades. Infrequent winter storms and hurricanes produce the most damaging winds.

4.3 Air Quality. The air in Hawaii is relatively clean and low in pollutants. Hawaii complies with the standards of the Clean Air Act of 1970, as well as the National Ambient Air Quality Standards for carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone, particulate matter, and lead. Hawaii is, therefore, an "attainment" state. The lack of sizeable heavy industry and nearly constant trade winds are instrumental in maintaining clean air.

Occasionally, natural pollution coming from volcanic action on the island of Hawaii to the southeast reaches Oahu. This "vog" is a sulfate haze. The primary gas from the active volcano is sulfur dioxide (SO_2). Vog includes particles of sulfuric acid and other chemicals that may combine with oxygen and moisture and become acid rain. Acid rain does not reach the island of Oahu.

The vehicular traffic around BAFS does not cause serious problems with either gases or suspended particles. The development of the RTI would do little to change the situation. The move from one location of Bellows to another will not increase traffic, except during the construction period, and should not affect air quality.

Construction activities at the proposed facility would expose soil, facilitating erosion and fugitive dust emissions. The contractor would manage the short-term fugitive dust with standard control measures, i.e., sprinkling the ground with water

and covering any soil stockpiles with impermeable materials. Much of the parcel is an old runway, which has light vegetation growing through the gaps in the asphalt. The runway overlies coral fill.

4.4 Noise. There are no disturbing noise sources on the proposed 48-acre site. On a site visit conducted May 8, 1998, staff members neither heard nor saw military or civilian helicopters. Helicopters may fly over the area on training missions.

The AF did a noise level study at the apex of the runways between 7:57 a.m. and 9:00 a.m. (date not recorded). The sounds are listed by number of separate times of occurrence: trucks (6), rooster (1), helicopters (9), motorcycle (2), wind (1), bird call (1), birds (2), distant bang (2), police siren (1). Decibel (db) levels during this time ranged from 41.9 (distant helicopters) to 81.1 (4 helicopters inland). The average (mean) was 50 db. This is less noisy than a room air conditioner (60 db) (Citizens Against Noise). The trucks were on Kalaniana'ole Highway. The helicopters were two groups of four military Chinooks.

Firing practice (for 8 soldiers) takes place once every three months between 9 a.m. and 5 p.m. HIARNG Regulation 200-1 regulates the National Guard's responsibilities concerning noise. The Environmental Noise Management Program requires compliance with HAR Title 11, Chapter 40-5. There have been no noise complaints at the present temporary site.

On Oahu, Section 11-46-4 prohibits noise levels of 55 dbA at the property line for greater than 10 percent of the time within any 20-minute period. HIARNG would maintain noise levels at the proposed site below State and Federal standards.

4.5 Geology and Soils. Two ancient shield volcanoes, the Waianae on the west and the younger Ko'olau on the east, form the island of Oahu. The highest peak in the Ko'olau is Konahuanui at an elevation of 3,150 feet. Numerous drainage basins dissect the Ko'olau Range. Steep cliffs rise from the ocean to heights of approximately 2,000 feet along the range. Coral reefs and alluvial sediments form the coastal plain. BAFS lies on raised Pleistocene reef limestones that form Waimanalo Bay, which is renowned for its wide white sand beach. The geology of the RTI parcel is complex, although now consists of primarily coral fill related to runway and revetment construction. The water table lies at approximately 20 feet below the surface.

Except for the island of Hawaii, the Hawaiian Islands are generally not seismic. The largest known earthquake in Waimanalo (4.7 +/-0.7) occurred in 1929 (Macdonald et. al., 1983). An earthquake that struck Maui in 1938 damaged roads and buildings on Maui and Molokai, and caused minor damage in Honolulu. A somewhat smaller earthquake from a source somewhere near Oahu broke windows in downtown Honolulu in the spring of 1948 (Macdonald et. al., 1983).

Tsunamis. Tsunamis present one of the most dangerous forms of natural phenomena to Hawaii (Figure 3). Tsunamis result from impulsive disturbances (such as earthquakes, volcanic eruptions, or landslides) that vertically displace columns of water. In general, earthquakes of magnitude less than six are unlikely to cause dangerous tsunamis in Hawaii. Between 1837 to 1975, seven tsunamis caused severe damage. Only one tsunami, with a wave height of 9 feet, reached the Waimanalo coast. Hawaii participates in the Pacific Tsunami Warning System, with the Hawaii Civil Defense activating warning sirens and directing the emergency broadcast system for evacuation of threatened areas (Morgan, 1983).

4.6 Water Resources. Oahu's water resources include perennial and intermittent streams, a few natural ponds, some wetlands, aquifers, and a huge lens shaped body of basal fresh water. The Ghyben-Herzberg lens floats on the salt water near sea level. Of the measured streams on Oahu, 80 percent have drainage areas smaller than 13 square kilometers. Stream channels are short and lack storage capacity. Flash floods are common. The quality of the fresh water from the basaltic aquifers is good. In general, Oahu's water budget is composed of 40 percent evapotranspiration, 36 percent ground water recharge, and 24 percent surface water runoff.

Groundwater. The lava rock (basalt) of the Ko'olau volcano contains groundwater as does the caprock (coral imbedded with clays). The basalt is a highly permeable aquifer, storing large quantities of fresh groundwater generated by the mountain rains. Near BAFS, the basalt contains impermeable vertical dikes that partially confine groundwater in compartments. Groundwater then seeps slowly out of the compartments and through the basalt toward the coast. The City and County of Honolulu uses this aquifer for drinking water. They maintain six wells at the foot of the Ko'olau mountains, approximately two miles south and southwest of BAFS.

The large freshwater lens is the most extensive of Oahu's groundwater sources. Groundwater trapped between impermeable rocks (dikes) in the mountains is a second source. Groundwater "perched" on horizontal impermeable beds is a third, but minor

source, on Oahu. The proposed project should not affect the groundwater of the area.

Surface Water. Surface water resources near BAFS include three streams: the Waimanalo, a perennial stream; the Inaole, an intermittent stream; and, the Kahawai (Figure 4). The Kahawai, a tributary to the Waimanalo, flows near the western boundary of the project parcel. The State Department of Health (DOH) monitored this stream in August and September 1992. The DOH found indicator bacteria (fecal coliform) exceeding State water quality standards. The most recent bacterial density analysis indicates that urban and agricultural activities, mostly beyond the borders of BAFS, affect the Waimanalo Watershed. The proposed project would have little impact on the three streams. The only impact on surface water resources would be during the period of construction. Storm runoff may increase until the contractor establishes stabilizing ground cover. This potential impact would be resolved through the grading plan and erosion control measures. No significant impact is expected. The Waimanalo is categorized as a small stream with a median flow of 1.7 cubic feet per second (Hawaii Cooperative Park Service Unit, 1990).

The DOH classifies Waimanalo Bay as open coastal waters. The beachfront is a very important aspect of BAFS. The proposed RTI site is roughly 4,000 to 5,000 feet inland, is not in the tsunami zone, nor is it in the 500-year flood zone (Figure 3). The HIARNG is not planning to build in the 100-year flood zone in the southwestern corner of the proposed area.

The Waimanalo and Inaole Streams form two drainage ways. Neither crosses the proposed HIARNG site, but one tributary to Waimanalo Stream (the Kahawai) flows near the northwestern end of the site, outside the fence.

4.7 Biological Resources. Alien plant species, first introduced by early Polynesians, were augmented by others introduced intentionally and unintentionally by Europeans, Americans, Asians, Pacific Islanders and other immigrants to Hawaii in the eighteenth, nineteenth and twentieth centuries. These introduced botanical species have crowded out most of the indigenous vegetation.

There are no listed or proposed candidates for threatened or endangered species of flora or fauna in the proposed 48-acre site. This area is primary koa-haole (*Leucaena leucocephala*) and Christmas berry (*Schinus terebinthifolius*) shrubland. Botanist Winona Char did a botanical survey on BAFS for the Land Use and Development Plan (Belt Collins Hawaii, 1995). The vegetation found on Bellows includes ironwood (*Casuarina equisetifolia*)

forest, koa-haole and Christmas berry shrubs, mixed introduced forest, and wetlands. Alien or introduced species dominate. Of the 22 native plants at BAFS, three occur only in Hawaii, and five were from the Polynesians that originally colonized the islands.

Biologist Phillip L. Bruner surveyed BAFS for birds and wild animals. The only listed bird Bruner recorded is the Black-necked stilt. The stilt requires a wetland habitat. (Note: none of the wetlands at BAFS is on the proposed 48-acre site). Dr. Bruner observed 21 exotic bird species and 4 species of common migratory shorebirds during the survey, but no native mammals. Exotic mammals for the area includes the Small Indian Mongoose, rat, mice, cats, and dogs. The Monk Seal and the Green Sea Turtle may occasionally visit the beach, but are not seen inland as far as the airstrips.

Soldiers attending classes or training on foot would not significantly affect vegetation or wildlife in the proposed area. Buildings, lawns, and recreation fields would replace the koa-haole shrubland. Construction of the RTI facilities would not affect any threatened or endangered vegetation or wildlife.

The proposed development of the RTI facility would not significantly influence Hawaiian fauna or avifauna. Plovers might increasingly find mowed lawns more congenial than the scrub vegetation now present.

4.8 Cultural Resources. Occupation of Oahu by Native Hawaiians was substantial by 1000 A.D. From 1000-1200 A.D, the vegetation changed. The pollen record shows that various grasses, shrubs and ferns replaced the loulu palm (*Pritchardia martii*), shrub, and legume vegetation. Experts suggest that this change corresponded with an increase in population and agricultural growth. Evidence from Site 4852 (018) at BASF, located near the shoreline north of Waimanalo Stream, indicates settlement between 800 and 900 A.D.; however, the radiocarbon dates and artifactual evidence upon which this is based is in dispute. Following Western contact, Waimanalo suffered a drastic decline in population. Historic records indicate that taro was still being cultivated over a large portion of Waimanalo, primarily in the LCA's (Land Commission Awards), located on the proposed RTI parcel. Myths and stories suggest that Waimanalo was a community of comfortable means and resources, and served as an arrival and departure point for *ali'i* from the other islands.

During the Great Mahele of 1848, all land was allocated among the Crown, the *ali'i* (chiefs) and the *maka'ainana* (commoners). The *ahupua'a* of Waimanalo became Crown Lands, or property of the Monarchy. Other owners of parcels in Waimanalo included

Kamamalu, a minor chiefess and descendent of Kamehameha the 1st. Kamamalu was awarded the *ili* (a subsection of an *ahupua'a* encompassing village units as well as agricultural lands) of Moanalua. The remainder of Waimanalo was divided into *kuleana* (small plots that included habitation areas and agricultural lands) and awarded to commoners. Later the Crown leased its property for sugar cane cultivation and cattle ranching.

A continuous cultural deposit probably overlays the back portion of the beach area between the dunes and Tinker Road. This deposit lies beneath aeolian and wave-deposited sands, and is located primarily along the eastern portion of BAFS, well to the east and outside the proposed RTI parcel. Present day archeological sites are local identifications of this deposit (Tuggle, 1997).

International Archaeological Research Institute, Inc. (IARII) conducted a subsurface site inventory for HIARNG at the proposed 48-acre project site (Appendix A). This archaeological investigation found three cultural sites (Figure 5). The first consisted of a small, deeply buried cultural deposit containing basalt flakes and burned coral, radiocarbon dated to between 1550 A.D. and 1650 A.D. The deposit is located beneath approximately 14 ft. of coral fill used to construct the runways which, in turn, lies beneath the asphalted surface of the runway. The second site consists of two large revetments designed to camouflage B-17 bombers. These features date from immediately after the December 7, 1941, attack on Bellows Field. The third site is a wooden fence thought to be a remnant of cattle ranching from the late 1930's. These are the only historic properties within the parcel. The revetments and the deposit are eligible for the Historic Register. The new facility will preserve and re-use revetments.

According to the 1995 Bellows Land Use and Development Plan, the permanent relocation of the HIARNG facilities to the southwest corner of the station will not adversely affect cultural resources (Belt Collins Hawaii, 1995). Prior investigations classified the proposed site as having a low probability for extant surface and subsurface archaeological remains. IARII's summary report discusses findings, assesses preliminary significance, and makes recommendations for further action (Appendix A).

4.9 Socioeconomics

Population. Waimanalo comprises diverse neighborhoods or communities. These include farm lots, small lot subdivisions, large lot beachside homes, a Hawaiian Homestead community, and remnants of plantation villages. Schools, churches, shopping

centers, the Neighborhood Board, and a community newspaper strengthen the sense of community identity. In 1996, Waimanalo's resident population of 9,057 was more than 50 percent Native Hawaiian. The average household size was four, higher than the island average of 3.02. There were 10.1 percent college graduates (Oahu average: 24.6). The median household income was \$42,763. The relatively small number of residents in the affluent beach community influenced and increased the latter. (State of Hawaii Data Book, 1997).

Economy. Tourism, the military, and agriculture have been major components of Oahu's economy in the twentieth century. On a statewide basis, tourism now provides the greatest share of the state gross product, the military next and agriculture the smallest of the three. On Oahu, the military share is probably somewhat larger and the agricultural share somewhat less.

Crops on agricultural lands neighboring Bellows would not be affected, nor would the forests on the slopes of the Ko'olau Range a few miles to the west of the proposed project.

The proposed project should not affect the location, distribution, or density of the human population of Waimanalo. During construction, contractors may hire some local workers. A positive impact on economic conditions is expected. The total estimated cost of phases I and II of the proposed project is \$14,072,000 of Federal funding. This Federal funding should produce a positive effect on the economy of Waimanalo and the county, and should increase tax revenues to the State. In addition to the direct costs paid by Federal dollars there would be a multiplier effect; wages to the direct employees would be spent on more goods and services, triggering a new round of employment. The total effect would be positive.

Protection of Children. In EO 13045, President Clinton directed each Federal agency to identify and assess environmental health risks and safety risks that may disproportionately affect children. The HIARNG will comply with this order.

4.10 Environmental Justice. On February 11, 1994, the President issued EO 12898 addressing environmental justice in minority and low-income populations. This order requires Federal agencies (including HIARNG) to consider the effects of a project on minority and low-income populations. NEPA documents such as this EA are to identify the potential impacts.

Waimanalo (population about 9,000) is the traditional community nearest the proposed project site. Waimanalo has no separate municipal government of its own, but is part of the City and County of Honolulu. BAFS makes up 22.5 percent of the Waimanalo's

total land area. Waimanalo is a community with a large native Hawaiian population and a high poverty rate.

A study completed for the Bellows Final EIS found that at least 50 percent of Waimanalo's population is Native Hawaiian. The proportion of Waimanalo's residents receiving public assistance is twice the island rate. The income situation of the Waimanalo community also seems less favorable on other indicators. Furthermore, the Waimanalo community has a wider gap in income distribution than the rest of the state.

In Hawaii, no ethnic group constitutes a majority. In the last census, there were: 33.4% white; 2.5% black; 0.5% American Indian, Eskimo, Aleut; 61.8% Asian or Pacific Islander (including 22.3% Japanese, 15.2% Filipino, 12.5% Hawaiian, 6.2% Chinese, 2.2% Korean, 1.4% Samoan, 0.5% Vietnamese, 1.5% Other Asian or Pacific); and 1.9% Other (State of Hawaii Data Book, 1997).

The HIARNG held meetings with the Waimanalo Neighborhood Board. The public and the community were invited. Appendix B contains letters of support from both the Waimanalo Neighborhood Board and the Waimanalo Hawaiian Homes Association.

4.11 Infrastructure

Solid Waste. The current quantity and rate of waste generated at RTI should not change appreciably, except for an increase during the construction period. During construction, the contractor will remove and dispose of all debris off-site, at a State-licensed landfill operation or licensed waste disposal facility. Establishing the RTI on the project site entails moving the operation from its present site (also on Bellows) as discussed, and will not generate significantly larger quantities of waste.

Drinking Water. The AF controls the field water supply. The proposed RTI facility will affect neither the quality nor quantity of the drinking water.

Wastewater. Wastewater currently flows into septic tanks and leach-fields. The RTI plans to continue with the same practice until the City and County of Honolulu improves Waimanalo Wastewater Treatment Plant (WWTP) and BAFS is connected to the system. Currently the City and County does not know when the State will approve and fund these plant improvements. The State DOH permits the Waimanalo WWTP a daily discharge of 16,920 gallons.

Installation Restoration Program (IRP). In order to remediate environmental contamination from past waste handling practices,

the Department of Defense initiated the IRP. The AF is diligently carrying out the IRP for the entire BAFS. The proposed 48-acre site requires no further action.

Energy. The state of Hawaii "depends on imported petroleum for more than 90 percent of its energy needs. No other state is so dependent upon a single energy source for its residential and commercial electricity, industrial power, and transportation fuels" (DBEDT, 1995).

Project engineers propose that Hawaiian Electric Company (HECO) provide power for the RTI facility from the existing system along Kalaniana'ole Highway through Hughes Road via an underground line. Many factors influence fuel consumption (speed, terrain, and hours of use, etc.); thus exact figures for anticipated fuel consumption are unknown. The consulting engineer would coordinate with HECO for energy resources impacts for proposed action.

Traffic and Access. Kalaniana'ole Highway, also posted as State Highway #62, provides access from eastern Honolulu to BAFS. From downtown and western Honolulu, the traffic uses tunnels through the Ko'olau mountains via the Pali and Likelike Highways, and H-3 Freeway.

The main gate to BAFS lies between Waimanalo Town and Waimanalo Beach Park. Tinker Road provides access to BAFS. Traffic counts at the junction of Tinker Road and Kalaniana'ole Highway show peak hours to be from 7:15 a.m. to 8:15 a.m., and 3:45 p.m. to 4:45 p.m. The speed limits are 35 mph-east and 25-mph west of Tinker Road.

According to the *Traffic Impact Report* performed for the HIARNG, the effect of the projected traffic from the RTI is minimal compared to the projected external traffic growth (Wilson Okamoto and Associates, 1998). The increased traffic results from the increased population and economic activities. The Wilson Okamoto study shows that traffic volumes generated from the project site to the intersections represent only 1.4% of the total traffic volumes, whereas traffic volumes due to external growth represent 7 through 10% of the total entering volume.

Kalaniana'ole Highway is a two-lane non-divided state highway that extends along the western boundary of BAFS. The intersection of Kalaniana'ole Highway and Hughes Road lies 650 feet northwest of BAFS and serves both approaches. The Main Gate Access Road carries 60 vehicles, 30 westbound and 30 eastbound. Kalaniana'ole Highway, just north of the Main Gate Access Road, carries a total of 1,341 vehicles, 649 northbound and 692 southbound.

Honolulu International Airport is the major aviation for Hawaii. It is the primary hub for domestic, overseas and inter-island flights. Honolulu International also functions as a joint military-civilian airport, sharing airfield facilities with Hickam AF Base (Statewide Airport System Plan, DOT).

Private cars are the major form of transportation on Oahu, along with the public bus system. There is no common carrier railroad in Hawaii.

Air operations at BASF ceased in 1942. The Marines based at the Marine Corp Base on Mokapu peninsula fly helicopters over the area. In the future, the Marines, who use the Bellows beachfront for amphibious landings, may establish a helicopter landing there.

4.12 Hazardous And Toxic Materials/Wastes. In 1996, the Headquarters AF Center for Environmental Excellence prepared the *Final Environmental Baseline Survey for Training Lands, BAFS, Waimanalo, Hawaii*. This survey documents the condition of the property resulting from the storage, use, and disposal of hazardous substances and petroleum products at BAFS. The study reported very few concerns to the RTI site.

SECTION 5.0 ENVIRONMENTAL CONSEQUENCES

The establishment of a training complex on the proposed 48-acre site would incur minimal impacts. This section fulfills the NEPA process, which requires consideration of these potential impacts.

5.1 Land Use

5.1.1 Effects of the proposed action. This is the proposed RTI Alternative. The RTI parcel remains in military use regardless of the proposed action. The site lies in the Urban Land Use District of the state of Hawaii and within the Federal zone of the City and County of Honolulu. It will remain there. There is no change of land use. HIARNG planners do not expect any change in neighboring land use due to the proposed project.

The Bellows Final EIS (FEIS) published in 1995 considered the proposed action and found it compatible in terms of land use and other environmental effects. The map showing the location of the proposed action was originally in the FEIS. The actions under consideration are consistent with the U.S. Pacific Command's Land Use and Development Plan for BAFS (Belt Collins Hawaii, 1995). The proposed 298th Regiment RTI facilities are an expansion of

the existing use of BAFS. The public and community would have use of the recreation field area. HIARNG would manage access and use.

While allowing greater flexibility of HIARNG activities, the proposed RTI site establishes a buffer zone between adjacent parcels that revert to State ownership. When ceded lands "set aside" become surplus under criteria set forth by the General Services Administration, they revert to the State without charge and improvement payment negotiated (Statehood Act and Public Law 88-233).

The State of Hawaii Department of Land and Natural Resources (DLNR), administers the land under HAR Title 13. All land designated surplus at BAFS is subject to the 1994 settlement of claims between the State of Hawaii and the Department of Hawaiian Home Lands (DHHL). Because of this settlement, DHHL has first claim to 200 acres of ceded land at BAFS. The proposed actions are consistent with the future DHHL housing development to the south of the site.

5.1.2 Effects of Alternatives to the Proposed Action.

5.1.2.1 This alternative (referred to hereafter as Alternative 700), calls for renovating and adapting BAFS Buildings 700 and 701 for use by the RTI. This site is within the Communications area of BAFS. The potential effects of the proposed action on the environment are the same as those for the preferred project site except for a few details.

Considerations of land use, air quality, noise, geology and soils, water resources, biological resources, socioeconomics, environmental justice, and infrastructure at the site are the same as those of the Preferred Alternative (the New RTI Alternative).

The exact location within the Communications area presents certain drawbacks:

- It is located in the center of the Marines' maneuver area and near an essential bridge serving a Waimanalo Stream crossing. The bridge is a choke point for tactical and administrative personnel and equipment movement north of the Stream.
- The two buildings are adjacent to the proposed Marine helicopter-landing zone. The noise level could be annoyingly high during aviation activity.
- Building 700 contains lead paint.

- Asbestos may be present (Belt Collins Hawaii, 1995).

Costs would be 50% higher than with the preferred alternative. Furthermore, these projected costs exceed the replacement value of the structures by 50%. When a project exceeds 50% of replacement, NGB-ARE, requires new construction. The former buildings were quarters and are not suitable for an RTI. Renovation of the buildings could produce satisfactory temporary quarters, but not permanent quarters.

Implementation of Alternative 700 would not affect the land use on the proposed project site. The AF controls the land, and no State or County zoning changes would occur.

5.1.2.2 Alternative Barbers Point (BP). Barbers Point Naval Air Station (16 miles west of downtown Honolulu) is another alternative. Land use on the former Naval Air Station (NAS) is similar to that at Bellows. City and County zoning is Federal-military, and the State land use designation is Urban. Barbers Point is closing approximately 2,000 acres from further use by the Navy; thus, HIARNG has planned to relocate its Diamond Head units to BP. There is a Memorandum of Agreement in effect for this relocation. HIARNG must vacate Diamond Head State Monument by the year 2012 because all activities not associated with the State Monument system must evacuate the area. Moving the permanent RTI to BP would require a change of plans. Some of the Diamond Head units would require additional funding for relocation elsewhere. Reprogramming new design and construction plans would delay funding.

5.1.3 Effects of the No Action Alternative. This alternative violates the law by not returning ceded lands, but would have no effect on the proposed project site, as this is excess Federal property. This alternative would not affect the urban or agricultural land use of the Waimanalo area.

5.2. Air Quality

5.2.1 Effects of the Proposed Action, the New RTI Alternative.

As previously discussed in Section 4.3, air quality at BAFS is good. The state of Hawaii is an attainment state. The Windward side of Oahu especially benefits from the nearly constant trade winds coming from the north and northeast.

HIARNG would implement standard precautionary measures to minimize fugitive dust impact during construction. Mitigation measures include conducting dust-generating activities away from the property boundaries to prevent off-site mitigation of

fugitive dust, and the use of water spray during earth-moving activities associated with the development of the permanent HIARNG facilities. Therefore, a new complex for the RTI constitutes no significant impact on air quality.

Construction vehicles may introduce tail pipe exhaust; however, the number of vehicles would be relatively small. Any impact on the air quality would be of a temporary and minor nature.

5.2.2 Effects of the Alternatives to the Proposed Action.

5.2.2.1 Alternative 700. This alternative proposes the use of Buildings 700 and 701 as part of a permanent complex. Air quality has no impact, but additional potential hazards include lead paint and possible asbestos.

5.2.2.2 Alternative BP. The quality of air at Barbers Point is similar to that at Bellows. BP is on Oahu's south shore and generally receives Northeast trade winds.

5.2.3 Effects of the No Action Alternative. The no action alternative has little or no effect on air quality. HIARNG must vacate the present site of the RTI. "No action" would require HIARNG to relocate elsewhere. The RTI and its predecessor HMA are an integral part of HIARNG. A temporary site is no solution.

5.3 Noise

5.3.1 Effects of the Proposed Action, the New RTI Alternative. Except for the construction period, there would be little change in the noise level at RTI. Most of the training at RTI is in classrooms and would continue to be in classrooms at the new location. The noise level at the proposed site is below normal. The actual construction would take place during normal daytime working hours. Construction contractors would comply with local and state regulations, which control the hours and levels of noise. There is no hospital nearby, but residences and a school are in the neighborhood.

5.3.2 Effects of Alternatives to the Proposed Action.

5.3.2.1 Alternative 700. The effects of this alternative on the noise environment would be the same as described in 5.3.1 above.

5.3.2.2 Alternative BP. The effects of this alternative on the noise environment would be the same as described in 5.3.1 above.

5.3.3 Effects of the No Action Alternative. Noise levels at the present site are similar to those regarding the Preferred Alternative. HIARNG must leave the site under the No Action Alternative. HIARNG would not be creating noise under the No Action Alternative because the RTI would not be on the same site.

5.4. Geology and Soils

5.4.1 Effects of the Proposed Action, the New RTI Alternative.

The proposed action would have no effect on the geology of the area, nor would it affect the soils. The soil in the proposed project site is fill, according to the *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai* (U.S. Department of Agriculture, 1972).

5.4.2 Effects of Alternatives to the Proposed Action.

5.4.2.1 Alternative 700. In terms of soil and geology, the effects of this alternative would be the same as described above (Section 5.4.1).

5.4.2.2 Alternative BP. The BP location is also a result of the original volcanic flows. The soil there is similar to that at Bellows (sand with coral outcroppings covered with fill). This site is outside the tsunami evacuation zone (only the beach area is vulnerable). Earthquake potential for Oahu is low; severe damage is not expected. Establishing the RTI complex would not affect geology or soils.

5.4.3 Effects of the No Action Alternative. There would be no effect on the geology or soils at the proposed project site, or the current site of the RTI.

5.5 Water Resources

5.5.1 Effects of the Proposed Action.

Water Resources. The proposed action would have little effect on water resources.

Surface Water. The proposed improvements would not significantly change the amount of impermeable surface on the 48-acre parcel. The RTI Complex would create some impermeable areas (buildings and parking lots) while eliminating others (the old runway). HIARNG's civil engineer does not anticipate any significant change in runoff due to changes in surface coverage. Furthermore, the Navy's FEIS drainage report, which assesses the impact of various projects including a permanent HIARNG facility,

concludes that the proposed action would significantly affect surface runoff. Permeability is high in the project area and the runoff from roofs and paved surfaces would likely sink into the adjacent soil. This would not seriously affect either the 100-year flood zones or the 500-year flood zones. The impacts to nearby streams, wetlands, and coastal waters would be minimal.

Ground water. The proposed action would have little effect on infiltration and groundwater supplies. The proposed action, if implemented, would continue to receive Board of Water Supply water through the BAFS system.

5.5.2 Effects of Alternatives to the Proposed Action.

5.5.2.1 Alternative 700. The alternative to renovate Buildings 700 and 701 would have no significant impact on water resources.

5.5.2.2 Alternative BP. The effects of this alternative on surface water and groundwater would be nonexistent.

5.5.3 Effects of the No Action Alternative. Surface and ground water will remain as they are now.

5.6 Biological Resources

5.6.1 Effects of the Proposed Action, New RTI. There are no listed plants in the proposed project site (Belt Collins Hawaii, 1995). Therefore, there is no significant impact to botanical resources. The faunal (animal) survey of BAFS found no endangered animals on the project site. There was a short-eared owl and Hawaiian bat seen in the past. The endangered stilt and migratory water birds frequent the lower reaches of Waimanalo Stream near the ocean.

5.6.2 Effects of Alternatives to the Proposed Action, the Barbers Point (BP) Alternative.

No significant impacts on biological resources at Barbers Point are expected. Consultation with U.S. Fish and Wildlife Service (USFWS) and DLNR would take place before any action here. Two federally listed plant species, 'akoko (*Chamaesyce skottsbergi* var. *skottsbergi*) and *Achyranthese splendens* var. *rotandata*, have been found at Barbers Point. An endangered bird species, the Hawaiian black necked stilt (*Himantopus mexicanus knudseni*), and various species of migratory birds were seen during November and December 1993 visits by USFWS and Pacific Naval Command natural resources personnel. Any proposed site at Barbers Point would require an endangered plant survey. There

would be minimal risk to the stilt at the inland site designated for HIARNG use.

5.6.3 Effects of the No Action Alternative. No listed vegetation or wildlife species are on the present temporary site of RTI. There would be no significant impacts on biological resources.

5.7 Cultural Resources

5.7.1 Effects of the Proposed Action. Archaeological resources and management.

Archaeological Sites Present on the Parcel. In accordance with Section 106 of NHPA, HIARNG, in consultation with Dr. Sara Collins and Ms. Elaine Jourdane of the State Historic Preservation Division (SHPD), developed a Scope of Work (SOW) to conduct a subsurface archaeological survey. IARII, an archaeological contractor with extensive experience at BAFS, conducted the survey. The lead investigators for the project were Dr. H. David Tuggle and Dr. Thomas Dye. This survey identified two archaeologically sensitive areas: a buried cultural deposit and two World War II-era bomber revetments. The cultural deposit is located in Trench 1E, approximately 2.4 m. below the surface. The deposit consists of waste flakes from stone tool manufacture, and fire cracked coral. The World War II-era site consists of two B-17 revetments located in the northwestern portion of the parcel. These earth-berm revetments are semi-circular in shape and finished with gunite. They connect to one another via a brick and concrete tunnel. Built immediately after 1941, the site is in excellent condition.

Resources Management. Preliminary recommendations for management of the buried cultural deposit include preservation, and determination of National Historic Register (NHR) status for both the buried deposit and the revetments (Appendix A). If HIARNG cannot preserve the deposit, IARII recommends other mitigation measures including data recovery. The SHPD will assess the B-17 revetments for eligibility for the NRHP. Preservation of the revetments will include adaptive reuse as part of the new facility.

HIARNG developed a monitoring plan for use during the construction and development. No fieldwork may proceed without concurrence of the State Historic Preservation Division. HIARNG must satisfy State and Federal laws including the NHPA, the Native American Graves Protection and Repatriation Act (NAGPRA), and HRS Chapter 6E. The proposed action should have no significant impact to historic sites. Additionally, HIARNG will conduct archaeological monitoring during hand clearing of

vegetation on the revetments, and all excavations that extend deeper than 3.0 m. on the inland portion of the runways. Furthermore, the HIARNG will also monitor excavations extending more than 2.0 m. in depth in the central portion of the runways, and excavations extending deeper than 1.0 m. in the northwest portion of the parcel.

The HIARNG will also conduct monitoring of geological borings for construction of the main buildings in accordance with the request of Ms. Elaine Jourdane, Historic Preservation Officer for Oahu.

5.7.2 Effects of Alternatives to the Proposed Action, the BP Alternative.

The descriptions of cultural resources at Barbers Point NAS BP can be found in the *Draft EIS for The Disposal and Reuse of Naval Air Station, Barbers Point, Hawaii, 1998*. There are 63 archeological sites eligible for listing on the National Register at BP. Should HIARNG choose to locate the RTI at BP, consultation with the State Historic Preservation Officer to determine if any historic properties exist on the RTI parcel would be required. This proposed action would have minimal impact on historic sites, but would require considerable expense and coordination.

5.7.3 Effects of the No Action Alternative. This alternative would have no effect on cultural resources. The old HMA site reverts to the State.

5.8 Socioeconomics

5.8.1 Effects of the Proposed Action, the New RTI Alternative. This proposed action would have a positive impact on the economy of Waimanalo. Positive effects include employing community members as National Guard personnel, infusing Federal funds to the area, and indirect multiplier effects. The proposed action should not significantly affect the numbers, health, institutions, or activities of residents or tourists in the area immediately surrounding BAFS. Finally, in terms of EO 13045, the proposed project would have little or no effect on health risks to children.

5.8.2 Effects of Alternatives to the Proposed Action, the BP Alternative. Barbers Point is in the Ewa region of Oahu. The City and County Development Plan designates this area as a Secondary Urban Center for Oahu. Since the early 1990s, it has increased in residential development. Projections show approximately 12 percent of the island's population will live in Ewa by 2020. Under this alternative, the proposed action would

have little effect on this expected population growth. In terms of economics, there would be a minor shift in federal funds from the Waimanalo community to the Ewa region.

Any proposed action on any Oahu site would have a positive impact on the economy of Oahu due to the influx of Federal funds.

5.8.3 Effects of the No Action Alternative. The no action alternative refers to the present temporary site of the RTI. There would be no positive effect because the federal funds would not be forthcoming. Furthermore, RTI personnel would have to move elsewhere, creating a minor negative effect on Waimanalo's economy.

5.9 Environmental Justice

5.9.1 Effects of the Proposed Action, the New RTI Alternative. This action does not address the legal issue of ceded lands, which is outside the scope of this document. In terms of environmental justice for the Waimanalo community, the proposed action to move and extend the RTI within BAFS boundaries will have little or no effect.

5.9.2 Effects of Alternatives to the Proposed Action, the BP Alternative. Persons of mixed ancestry dominate the ethnic makeup of civilian populations in Hawaii. The proposed action would have little effect on the population of the Ewa region.

5.9.3 Effects of the No Action Alternative. By law, the AF, HIARNG, and RTI must vacate the quarters currently used. This is an effort to redress the situation for the taking of lands for military use. That action is separate from the proposed action, the establishment of the RTI complex on BAFS. The "No Action" alternative would have little effect on environmental justice.

5.10 Infrastructure

The execution of the preferred alternative has little effect on the existing infrastructure.

Part of the proposed action is to install traffic signals at the intersection of Hughes Road and Kalaniana'ole Highway. Use of the signals would improve vehicular movement along Kalaniana'ole Highway and improve the operating conditions of turning movement entering and leaving Hughes Road. Consultant Wilson Okamoto and Associates also recommended modifying the signal phase timing at the intersection of Poalima and Kalaniana'ole Highway. This would alleviate current and projected roadway congestion.

HIARNG plans to incorporate maintenance of sight distances at the intersections studied. Implementation of the above plans ensures that the proposed RTI would not have a significant adverse impact on traffic operations. On the contrary, installation of the lights with recommended timing would improve the current situation.

Solid Waste.

5.10.1 Effects of the Proposed Action, the New RTI Alternative. Solid waste generation at RTI will increase during construction. Contractors collect and dispose of solid waste at a licensed facility for the HIARNG. During the proposed construction, the construction contractor is required to move and dispose of, off-site, all debris at a State-licensed landfill operation.

5.10.2 Effects of Alternatives to the Proposed Action, the BP Alternative. The same situation described in 5.10.1 would prevail in this alternative.

5.10.3 Effects of the No Action Alternative. Under this alternative, there would be no HIARNG waste at the current RTI site.

Drinking Water.

5.10.1 Effects of the Proposed Action, the New RTI Alternative. The Board of Water Supply furnishes water for the base, but BAFS controls the usage. This proposal would not affect the quality, and would minimally increase the quantity of the drinking water.

5.10.2 Effects of Alternatives to the Proposed Action, the BP Alternative. The Navy owns and maintains a separate water system from the Board of Water Supply. The establishment of the RTI complex would not effect the water supply or system significantly.

5.10.3 Effects of the No Action Alternative. This alternative would not significantly affect the Bellows water supply.

Wastewater.

5.10.1 Effects of the Proposed Action, the New RTI Alternative. Currently there is a moratorium on municipal sewer connections for Waimanalo. HIARNG proposes the use of a septic tank and leaching field as an interim measure for sewage until the Waimanalo WWTP expands to enable connection. HIARNG foresees no significant impact to wastewater.

5.10.2 Effects of Alternatives to the Proposed Action, the BP Alternative. Wastewater currently generated goes to the City and County of Honolulu Honouliuli wastewater treatment plant. Specific site plans for the RTI hook-up are not available.

5.10.3 Effects of the No Action Alternative. The RTI and HIARNG would not be at its present site on Bellows. HIARNG must vacate this site. The AF must return the 170 acres of excess land to the State.

Installation Restoration Program (IRP). The AF is diligently executing an IRP for BAFS. HIARNG's proposed 48-acre site does not require any further action for the IRP.

Energy. Imported petroleum supplies almost all of the energy needs for the entire state. Figures are not available to determine future fuel consumption.

5.10.1 Effects on the Proposed Action, the New RTI Alternative. The establishment of RTI on the Communications site at Bellows will do little to change the current situation. Under the preferred alternative, the RTI would be moving a short distance on BAFS.

5.10.2 Effects of Alternatives to the Proposed Action, the BP Alternative. The move to BP would not affect the solid waste protocol, the drinking water situation, the wastewater provisions, the HIARNG response to IRP, or the energy supply or use.

5.10.3 Effects of the No Action Alternative. There would be no immediate effect on infrastructure.

5.11 Hazardous and Toxic Materials/Wastes

5.11.1 Effect of the Proposed Action. Use of hazardous and toxic materials will not increase in the near-term at RTI except during construction. HIARNG protocols would be in place: the Hazardous Waste Management Plan, the Spill Prevention Control and Countermeasure Plan, and the Installation Spill Contingency Plan.

5.11.2 Effects of Alternatives to the Proposed Action, the BP Alternative. Moving to BP would not affect the use or disposal of hazardous and toxic materials/waste. The same HIARNG protocols would be in place as stated in 5.11.1.

5.11.3 Effects of the No Action Alternative. The effect of the no action alternative is that the RTI must leave the FMA site. The site will return to the jurisdiction of the State of Hawaii.

Thus, the "No Action" alternative will not have any effect on hazardous or toxic materials/wastes.

5.12 Mitigation Measures

Measures described below mitigate any potential impact on air, water, and cultural resources.

Air Quality. During construction, HIARNG would implement standard precautionary measures to minimize fugitive dust impact. These measures include conducting dust generating activities away from the property boundaries to prevent off-site mitigation of fugitive dust, or the use of water spray during earth moving activities associated with the development of the permanent HIARNG facilities. Therefore, there are no significant effects to air quality.

Water Quality. During construction, storm water runoff may increase until ground cover establishes itself. Development of the RTI will include both a grading plan and erosion control measures to minimize sediment runoff. These best management practices include silt fences and containment berms to minimize site runoff to Kahawai Stream, with ground cover after construction. Therefore, we predict no significant impact to water quality.

Cultural Resources. Protection described in Section 5.7.1.

5.13 Cumulative Effects. In summary, in terms of land use, air quality, noise, geology, soils, water resources, biological resources, cultural resources, socioeconomics, traffic, environmental justice, infrastructure, hazardous materials and wastes, the HIARNG anticipates minimal cumulative effects on the environment from the proposed action.

The 1995 Bellows Land Use and Development Plan, which encompasses HIARNG's proposed action, stated that moving the HIARNG RTI to the proposed project site will have no significant impacts on the Waimanalo community (Belt Collins Hawaii, 1995; Community Resources, 1995).

**SECTION 6.0
COMPARISONS OF ALTERNATIVES AND CONCLUSIONS**

6.1 Comparison of the Environmental Consequences of the Alternatives

In summary, the HIARNG foresees minimal or no significant impact on the environment from the proposed action or any of its alternatives.

6.2 Conclusions

The proposed action would meet the existing training and mission requirements of the Department of the Army and the HIARNG in the most effective way.

The State DOH Administrative Rules (Chapter 11-200 HAR) specifies the criteria for determining if an action may have a significant effect on the environment. The proposed action is not likely to involve any of the following criteria:

- destruction of any natural or cultural resource;
- curtailment of the range of beneficial uses of the environment;
- conflict with the State's long-term goals or guidelines as expressed in HRS Chapter 344;
- substantial effect on the economic or social welfare of the community or state;
- substantial effect on public health;
- substantial secondary effects, such as population changes or infrastructure demands;
- substantial degradation of environmental quality;
- cumulatively a considerable effect on the environment, or a commitment to a larger action;
- substantial effect on rare, threatened, or endangered species or its habitat;

- significant effect on air or water quality or ambient noise levels;
- significant effects on environmentally sensitive areas, such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, freshwater area, or coastal waters.
- substantial effects on vistas or viewplanes; or
- substantial consumption of energy.

The HIARNG will implement appropriate mitigation measures should cumulative impacts over time appear to affect the human environment.

Based on the above discussion, and taking into account the suggested measures to preclude impacts, implementation of this project does not appear to be a major action significantly affecting the quality of the natural or human environment. There are no indications that implementation of the proposed action will violate Federal, State, or county environmental regulations. Therefore, HIARNG-anticipates *A Finding of No Significant Impact (FNSI)*.

In accordance with Chapter 11-200 HAR, HIARNG will publish (announce) the FNSI in the Environmental Notice of the State Office of Environmental Quality Control, and in a local newspaper of general circulation.

SECTION 7.0 REFERENCES

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SECTION 8.0

ACRONYMS

BAFS, Bellows Air Force Station

BP, Barbers Point

CAA, Clean Air Act

CFR, Code of Federal Regulations

CWA, Clean Water Act

dba, unit of measurement describing the total sound level

DOD, Department of Defense

DOH, Department of Health

DLNR, Department of Land and Natural Resources

EA, Environmental Assessment

EIS, Environmental Impact Statement

EO, Executive Order

11988, Floodplain Management, 24 May 1997

12898, Federal Actions to Address Environmental Justice in Minority and Low Income Populations, 1995

13045, Protection of Children from Environmental Health Risks and Safety Risks, 1997

FNSI, Finding of No Significant Impact
HIARNG, Hawaii Army National Guard
HAR, Hawaii Administrative Rules
HMA, Hawaii Military Academy
HRS, Hawaii Revised Statutes
6E, Standards for Archaeological Monitoring Studies
205, Coastal Zone Management
226, State Planning
343, Environmental Impact Statement
344, Environmental Policy
174, Conservation & Resources
183, Conservation District

IARII, International Archaeological Research Institute, Inc.
LCA, Land Commission Awards
NAGPRA, Native American Graves Protection and Repatriation Act
NAS, Naval Air Station
NEPA, National Environmental Policy Act
NGB, National Guard Bureau
NGB-ARE, National Guard Bureau, Army Environmental
NHPA, National Historic Preservation Act
NHR, National Historic Register
NRHP, National Register of Historic Places
RTI, Regional Training Institute
USFWS, U.S. Fish and Wildlife Services
WWTP, Wastewater Treatment Plant

SECTION 9.0
GLOSSARY

Ahupua'a, Traditional socio-political land unit extending from the ocean to the ridge top

Ali'i, Hawaiian Royalty

Ili, A subsection of an *ahupua'a* encompassing village units as well as agricultural lands

Kuleana, Small plots that included habitation areas and agricultural land

Pali, Cliffs

Pu'uhonua, Place of refuge

Mahele, Land division of 1848 in which land was divided between the Crown, the ali'i and the maka'ainana

Maka'ainana, Commoners

**SECTION 10.0
LIST OF PREPARERS**

Ms. Jane E. Yamamoto, Environmental Planner, HIARNG

LTC Ron Swafford, Environmental Protection Specialist, HIARNG

**SECTION 11.0
AGENCIES AND INDIVIDUALS CONSULTED**

City and County of Honolulu, Department of Land Utilization,
Mr. Arthur Challacombe, SMA Coordinator

Hawaii Department of Land and Natural Resources, Land Division,
Mr. Sterling Yong, FIRM Coordinator

Hawaii Department of Defense, Hawaii Air National Guard,
LTC Donald McKinney, and CPT Charles Anthony,

Hawaii Department of Defense, Hawaii Army National Guard,
COL Clarence M. Agena, COL James Carpenter, COL Joseph J. Chaves,
COL Melvin Ida, COL Emerick Y. Kaneshi, COL Orlan L. Peterson,
COL George F. Sheridan, LTC John K. Hao, LTC Ron Swafford, LTC
Richard Young, MAJ Thomas Madeira, CPT Arnold Iaea, CPT Steve C.
Lai, CW3 Nelson M. Kunitake, SGT Stephen Lum

Hawaii Department of Business, Economic Development, and Tourism,
Dr. Xijun Tian

Hawaii Department of Health, Clean Air Branch, Ms. Susan Kihara

Hawaii Department of Land and Natural Resources, State Historic
Preservation Division, Mr. Don J. Hibbard

U.S. Air Force, 15ABW, SSgt Roy Dye

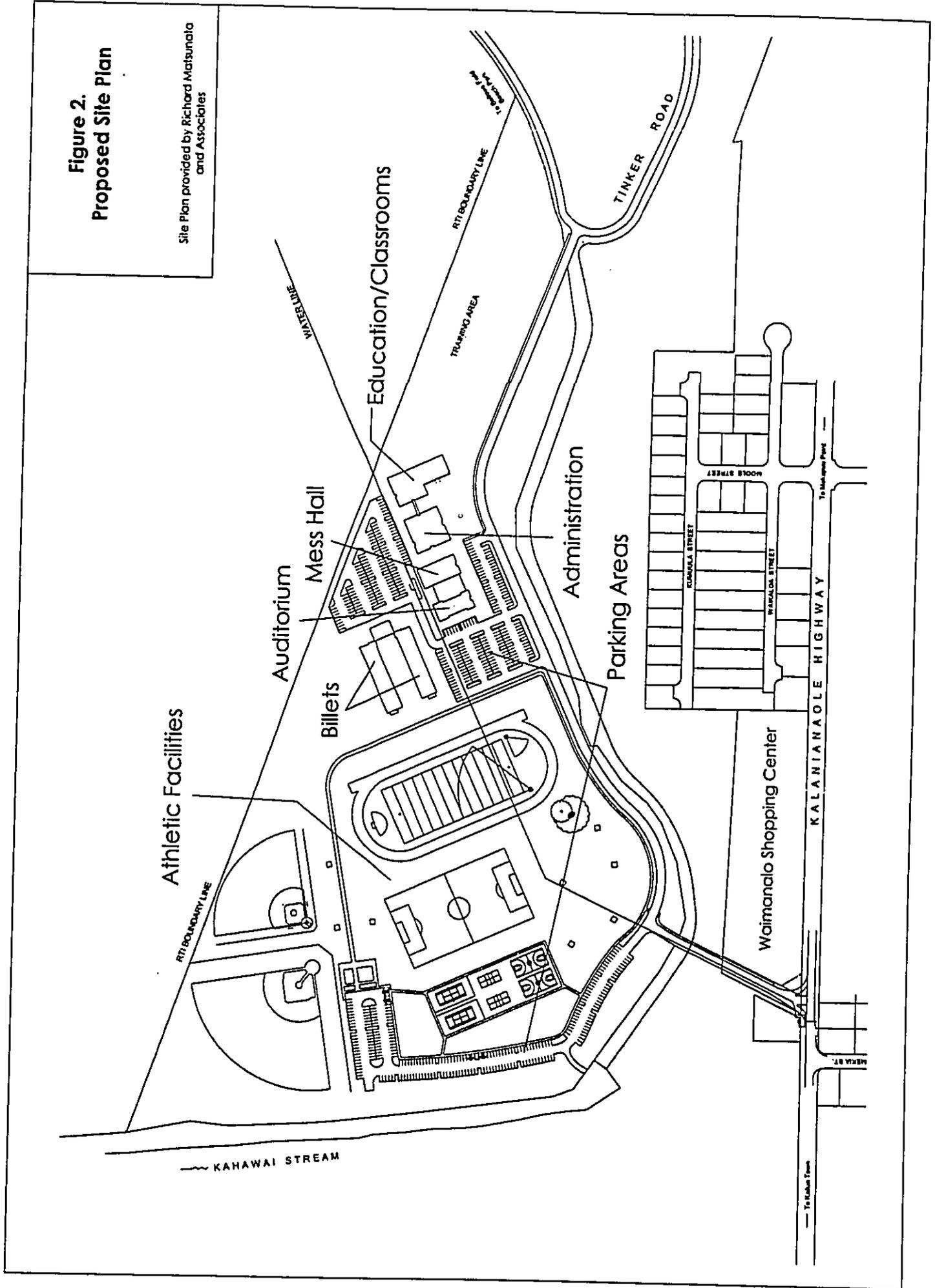
U.S. Fish and Wildlife Service, Pacific Islands Office,
Mr. Robert Smith

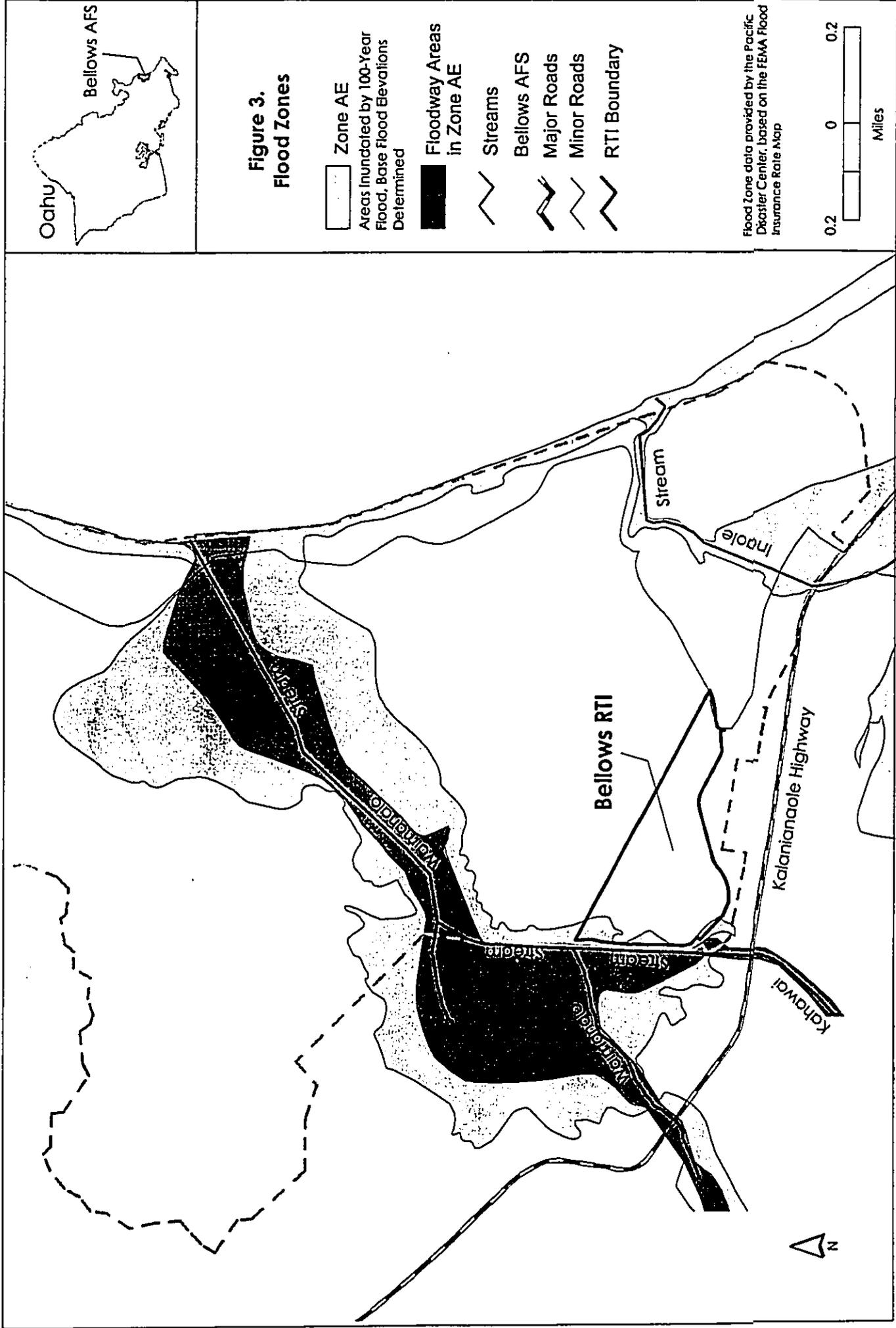
CORRECTION

THE PRECEDING DOCUMENT(S) HAS
BEEN REPHOTOGRAPHED TO ASSURE
LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING

Figure 2.
Proposed Site Plan

Site Plan provided by Richard Matsunaga
and Associates





Appendix A

Cultural Resources Inventory Survey by
International Archaeological Research Institute, Inc.

International Archaeological Research Institute, Inc.

PREHISTORIC & HISTORIC INVESTIGATIONS • CULTURAL RESOURCES ASSESSMENTS & PLANNING • PALEOENVIRONMENTAL STUDIES

November 19, 1998

Col. Ron Swafford
State of Hawaii Department of Defense
3949 Diamond Head Road
Honolulu, Hi. 96816

Dear Col. Swafford:

RE: *Cultural Resources Inventory Survey for the Hawaii National Guard Training Academy, Bellows Air Force Base, Waimānalo, Island of O'ahu, Hawai'i.*

This letter report summarizes the results of a cultural resource inventory survey conducted on a portion of the present Bellows Air Force Station (BAFS) at the request of Hawaii Army National Guard (HIARNG), per the contract letter of July 15, 1998.

Project

The 40 acre project area, located at the southwest corner of the BAFS, will be transferred to HIARNG from the U.S. Marine Corps as part of a general land transfer of 387 acres from the U.S. Air Force to the U.S. Marine Corps. The two maps used to identify the project area are a survey map by Controlpoint Surveying and a map of the planned facilities by Fong & Associates, both provided by HIARNG.

The primary research problem was the identification of subsurface pre-Contact (pre-1778) and 19th century Hawaiian cultural remains in the project area. Archival research was conducted concerning the history of use of the project area, employing 19th century Land Commission Award (LCA) data as well as 19th and early 20th century maps. The approximate position of the 19th century LCA features on the modern landscape was determined by overlaying the 19th and 20th century maps on a map of modern facilities, which was in turn used as a guide for ground reconnaissance and testing.

Fieldwork was conducted from November 2 through November 11, 1998, and consisted of a general reconnaissance surface survey and backhoe excavations. Final GPS readings were made on November 16, 1998. Project area reconnaissance was carried out by Tom Dye (Project Manager), Dave Tuggle (Project Director), and Wendy Tolleson (Cultural Resource Manager of HIARNG). The fieldwork was directed by Dave Tuggle, with the assistance of Coral Magnuson. Wendy Tolleson monitored the fieldwork. Steve Athens

HAWAII: 949 McCully St., Suite 5, Honolulu, Hawaii 96826-2780 Tel: (808) 946-2548, 943-0628 Fax: (808) 943-0716 e-mail: iar11@aloha.net
NORTHWEST: P.O. Box 51058, Seattle, Washington 98115-1058 Tel: (206) 366-0337 Fax: (206) 366-0338 e-mail: iar11@wolfenet.com
GUAM: P.O. Box 22621, GMF, Guam 96921 Tel/Fax: (671) 734-2755 e-mail: iar11@kuentos.guam.net
PALAU: P.O. Box 1714-1103, Koror, Palau 96940 Tel/Fax: (680) 587-3631 e-mail: iar11@palaunet.com

conducted the paleoenvironmental augering. Backhoe excavations were done by Charlie Souza of Charlie's Backhoe.

The backhoe trenches were placed in areas of possible 19th century features that were accessible to the backhoe (Fig. 1). Work in some areas was restricted by dense vegetation. In addition, the trenching proved that the runway fill in the inland portion of the project area is too deep (greater than 10 feet) to be excavated with the available backhoe. Nine backhoe trenches (some discontinuous) were excavated. No deposits suitable for paleoenvironmental coring were encountered, but one trench was appropriate for augering, which was carried out. Trenches were recorded with column profiles and photography. Soil samples and artifacts were collected. Locations of trenches were mapped in reference to a datum from a waterline survey, which is recorded on the two maps reference above. GPS readings were also taken at the waterline datum and at trench locations.

Results

Reconnaissance indicates that there are no surface remains of pre-Contact or 19th century sites in the area, a finding consistent with previous surveys of the area. There are, however, 20th century historic features. The backhoe trenching did not produce any evidence for the 19th century occupation, but one cultural deposit was identified.

The project area was found to have a deep layer of WWII runway construction fill generally overlying natural deposits. Many areas off the runways also are covered with WWII construction fill, which was packed and leveled. One portion of the project area, the lowest in elevation (the NW corner) has been intensively bulldozed, probably within the last 10 to 15 years, leaving mounds of soil and modern cultural debris. It is concluded that pre-WWII cultural features and deposits were generally destroyed by WWII construction, with a few limited areas preserved below construction fill.

The three recorded cultural resources may be summarized as follows (Fig. 1), including their potential eligibility to the National Register of Historic Places (NRHP):

(1) Two WWII gunite-covered B-17 revetments. These have been recommended as probably eligible for the NRHP (Ann Yoklavich and Spencer Leineweber 1997, *Architectural Inventory and Evaluation of Pre-1950 Military Resources at Bellows Air Force Station, Oahu, Hawaii*. Appendix F in N. Farrell and R.L. Spear, *Cultural Resources Management Plan (CRMP) for Bellows Air Force Station, Waimanalo, Ko'olaupoko, Island of O'ahu, Hawai'i*. Prepared for U.S. Army Corps of Engineers, Pacific Ocean Division. SCS/CRMS, Inc., Honolulu).

(2) A wooden fence enclosure that probably dates to the 1950s-1960s. This property is not considered eligible to the NRHP.

(3) A cultural deposit, probably pre-Contact in age, located beneath runway fill at a

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(3) A cultural deposit, probably pre-Contact in age, located beneath runway fill at a

depth of about 240 cm below surface; the deposit is about 25 cm thick and covers an area at least 10 by 15 m; it contains charcoal and small basalt flakes; the preliminary interpretation is that this is a Hawaiian agricultural deposit. This type of a deposit is unique in the archaeology of the Bellows area and the property is considered probably eligible to the NRHP.

Preliminary Recommendations

The following are preliminary recommendations made with the intent of providing some working guidelines for planning purposes, but with the recognition that these may be changed in the final report, based upon the detailed study of the information collection during the field investigations. Figures 2 and 3 refer to areas noted in the recommendations in relation to the existing conditions of the project area and to facilities proposed for HIARNG.

1. The two revetments should be recorded and the information submitted to the State Historic Preservation Officer (SHPO) with a recommendation for NRHP eligibility, if such a determination has not been made.

2. If possible, the two revetments should be preserved and considered for adaptive reuse (that is, maintaining their historic integrity, but using them in some productive manner for HIARNG activities).

3. For the wooden fence enclosure, the final report will recommend that it is not eligible for the NRHP and that no additional historic preservation action be conducted.

4. For the buried cultural deposit, the final report will recommend that it be considered eligible for the NRHP. If this site is not to be impacted by the construction activities, it is recommended that it be preserved. However, if there is a probability that the site will be destroyed, then data recovery should be conducted.

5. Archaeological monitoring should be conducted during HIARNG development and construction activities in the following situations (Fig. 2):

(a) vegetation clearing of the revetments;

(b) any excavations that would be greater than three meters in depth on the inland portion of the runways (Area A);

(c) any excavations that would be greater than two meters in depth in the central portion of the runways (Area B);

(d) any excavations that would be greater than one meter in depth in the NW corner of the project area (Area C).

6. In recognition of the fact that this area has a well-recorded history (19th century

Hawaiian settlement and agriculture; sugar cultivation; part of the 1917 Waimanalo Military Reservation; WWII, and HIARNG), it is recommended that an interpretive program be developed. This could involve some combination of displays, brochure, and interpretive signs directed toward the HIARNG users, as well as toward the local community.

Final Report

It is anticipated that the Draft Report will be submitted on schedule (January 29, 1999, as indicated in the Research Design). Please note that the Draft Report will contain maps with accurate locations of trenches. GPS data will also be included. The figures that accompany the letter report are preliminary and are intended as general planning guides, but not for engineering or design purposes.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Dye", followed by a horizontal line extending to the right.

Tom Dye
Project Director
and
Dave Tuggle
Field Director

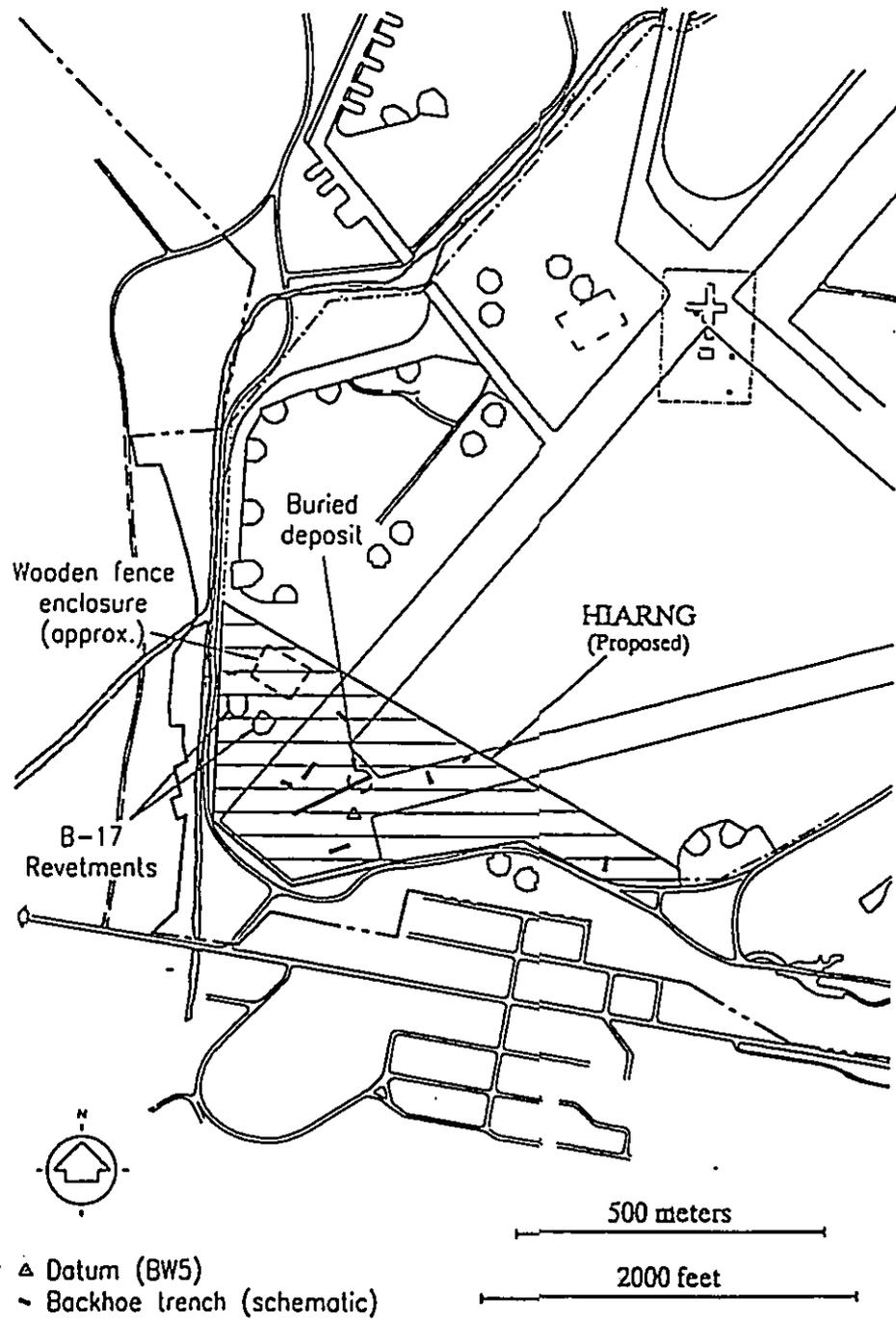


Figure 1. Project area, showing trenches and historic properties. (Note: this figure is preliminary. It is intended as a general planning guide, but is not intended for engineering or design purposes.)

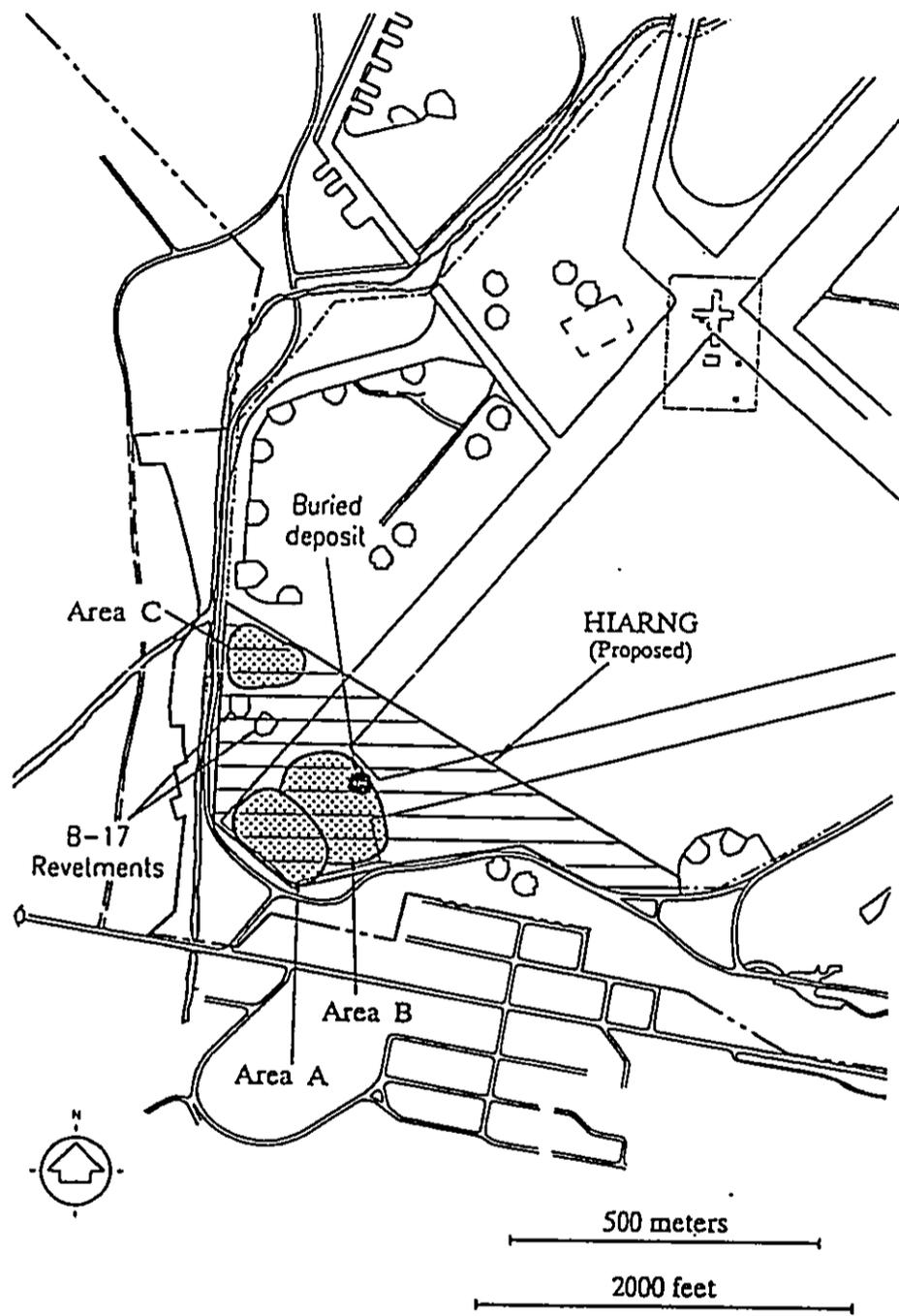


Figure 2. Existing conditions of the project area showing historic properties and areas recommended for monitoring of subsurface excavations. (Note: this figure is preliminary. It is intended as a general planning guide, but is not intended for engineering or design purposes.)

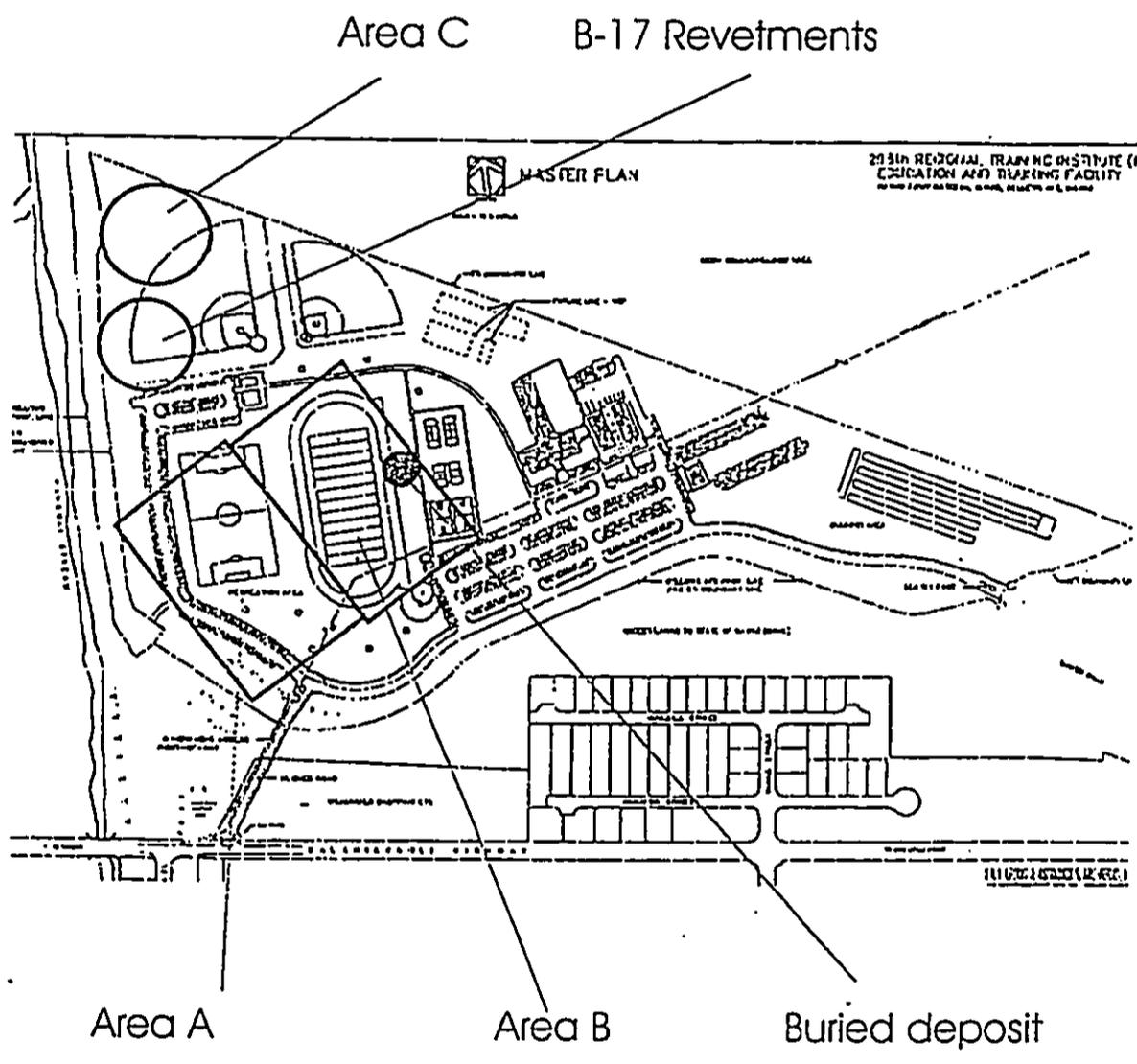


Figure 3. Proposed HIARNG facilities in the project area, showing historic properties and areas recommended for monitoring of subsurface excavations. (Note: this figure is preliminary. It is intended as a general planning guide, but is not intended for engineering or design purposes.)

Appendix B

Pre-Assessment Consultation Letters

B1-State Historic Preservation Division;
B2-U.S. Fish and Wildlife Service;
B3-Waimanalo Neighborhood Board;
B4-Waimanalo Hawaiian Homes Association.

BENJAMIN I. CAYETANO
GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhikawa Building, Room 555
601 Kamehaha Boulevard
Kapolei, Hawaii 96707

DEC 18 1998

REF:HP-JK

Lieutenant Colonel Ron Swafford,
Environmental Protection Specialist
Facilities Management Office
Hawaii Army National Guard
State of Hawaii Department of Defense,
Office of the Adjutant General
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
GILBERT COLOMA-AGARAN
TIMOTHY E. JOHNS

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES

ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

LOG NO: 22667 ✓
DOC NO: 9812SC13

Dear Lieutenant Colonel Swafford:

**SUBJECT: National Historic Preservation Act, Section 106 Compliance Review of a Draft Environmental Assessment for the Proposed Establishment of the Regional Training Institute Complex at Bellows Air Force Station Waimanalo, Ko'olaupoko, O'ahu
TMK: 4-1-015: 001**

Thank you for the opportunity to comment on the draft Environmental Assessment (DEA) prepared for the proposed establishment of the Hawaii Army National Guard's (HIARNG) Regional Training Institute (RTI) at Bellows Air Force Station (BAFS) in Waimanalo, O'ahu. According to the DEA, the RTI will occupy 48.0 acres formerly used as a Communications area, at the southwestern end of inactive runways. The RTI development plan calls for three phases: Phase I includes the construction of an administration and education facility, with dining, parking, sidewalk, and access road; Phase II would provide billets and a multi-purpose building and physical fitness area; Phase III would provide recreational areas. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the subject parcel.

The DEA provides a brief summary of cultural resources known to be present on BAFS. According to our records, no historic sites are known to be present within the 48-acre parcel proposed for development of the RTI. Nonetheless, as noted in the DEA, it is likely that the sand dunes underlying much of the project area contain significant historic sites such as subsurface cultural deposits and human burials. Consequently, the number of new structures to be built over the three phases of development, together with associated utility and sewage lines, and other

Lieutenant Colonel Ron Swafford
Page Two

improvements, may have an "adverse effect" on significant historic sites which may be present in the project area.

We previously commented on your office's proposal to conduct an archaeological inventory survey of the subject parcel, concurring with your decision to undertake such work. The DEA indicates that an archaeological consultant to HIARNG has recently completed the field work portion of an inventory survey with subsurface testing. Our office has not yet received the report documenting the results of the survey although it appears that at least two historic sites were located. Once we receive and review the report of findings made during the inventory survey, we can better advise your office of the significance of the identified historic sites, the effects (if any) of the proposed undertaking on significant historic sites, and what mitigation plans, if any, should be developed.

At this time, therefore, we can only reiterate our concurrence with your office's decision to carry out an archaeological inventory survey with subsurface testing of the area proposed for development of the RTI. We look forward to receiving the report documenting the results of the survey.

Should you have any questions, please feel free to call Sara Collins at 692-8026.

Aloha,



Michael D. Wilson, Chairperson and
State Historic Preservation Officer

SC:jk



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Ecoregion
300 Ala Moana Boulevard, Room 3-122
Box 50088
Honolulu, Hawaii 96850

DEC 14 1998

Lieutenant Colonel Richard Young
Facility Management Officer
Hawaii Army National Guard
State of Hawaii Department of Defense
3949 Diamond Head Road
Honolulu, HI 96816-4495

Re: *Establishment of a Regional Training Institute Complex, Bellows Air Force Station, Waimanalo, Hawaii*

Dear Lieutenant Colonel Young:

The U.S. Fish and Wildlife Service (Service) has reviewed the draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the above referenced project. We have also received your November 27, 1998, request for our concurrence, under section 7 of the Endangered Species Act, with your determination that the proposed project will not affect any federally listed, proposed, or candidate species. The lead agency is the National Guard Bureau. This letter has been prepared under the authority of and in accordance with provisions of the Endangered Species Act of 1973 [16 U.S.C. 1531 *et seq.*; 87 Stat. 884], as amended, and other authorities mandating Department of the Interior concern for environmental values. Based on these authorities, the Service offers the following comments for your consideration.

The proposed action involves construction of a Regional Training Institute on 48 acres of land on Bellows Air Force Station, Waimanalo, Hawaii. The land will be licensed from the U.S. Air Force 15th Air Base Wing. The project will be constructed in phases and will include administration and education facilities, roads, parking, sidewalks, billets, a multi-purpose building, and physical fitness and recreational areas.

The EA indicates that there are no listed species or sensitive habitats within the project area. Likewise, our records do not indicate the presence of wetlands or federally listed species at the project site. Accordingly, no significant adverse impacts to federally listed or candidate species are expected to result from the proposed project. Therefore, the Service concurs with the no effect determination for the proposed project.

In view of the above, we believe that the requirements of section 7 of the Endangered Species Act (Act) have been satisfied. However, obligations under section 7 of the Act must be reconsidered if (1) new information reveals impacts of this defined action that may affect listed species or critical habitat in a manner which was not previously considered in this assessment;

(2) this action is subsequently modified in a manner not considered in this assessment; or (3) a new species is listed or critical habitat determined that may be affected by the identified action.

With regard to the EA, the Service believes that the document adequately describes the major fish and wildlife species and habitats existing at the proposed project site and adequately evaluates the potential impacts to those resources anticipated to result from the proposed project. The Service believes that no significant, project-related adverse impacts to fish and wildlife resources are expected and, therefore, we concur with your Finding of No Significant Impact (FONSI) determination for the proposed project.

We appreciate your interest in protecting endangered and threatened species and minimizing project-related impacts to fish and wildlife resources. If you have questions or comments, please contact Fish and Wildlife Biologist Chris Swenson by telephone at (808) 541-3441 or by facsimile transmission at (808) 541-3470.

Sincerely,

Barbara A. Masfield, Acting

for Robert P. Smith
Pacific Islands Manager



WAIMANALO NEIGHBORHOOD BOARD NO. 32

c/o NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 400 • HONOLULU, HAWAII 96813

October 13, 1998

Edward V. Richardson
Major General
Hawaii Army National Guard
DEPARTMENT OF DEFENSE
3949 Diamond Head Road
Honolulu, HI 96816-4495

Re: HANG Training Facility at Bellows AFS

Dear Maj. Gen. Richardson:

On Monday, October 12, 1998, the Waimanalo Neighborhood Board unanimously voted in favor of the planned training facility to be built on Bellows AFS as presented by the Hawaii Army National Guard in a Waimanalo Community Town Meeting on September 28, 1998.

The community appreciated the special attention you gave to Waimanalo by being there personally to answer questions concerning this facility. Respect and Integrity were words often used as residents described first impressions of you. Of particular interest to the community is your assignment of Ms. Wendy Goodman to focus on and protect the Hawaiian archeological sites that may appear during the construction phase of the facility.

Sharing the facilities on the islands of Hawaii, Molokai, Oahu and Kauai told us that your programs will be of great benefit to the residents and students in our neighborhood. We were unaware that the National Guard was doing so much with the youth and it opened a lot of eyes to the value of having you build in Waimanalo.

The Neighborhood Board and the community of Waimanalo thank you for all that you are bringing to the area, both the facility and instructors or experts willing to share with our young people. We hope that your soldiers will be role models for our young people and give them options for a career in the military as a worthy occupation.

Sincerely,

Wilson K. Ho
Chairman



Oahu's Neighborhood Board System - Established 1973

WAIMANALO HAWAIIAN HOMES ASSOCIATION

41-830 Kalaniana'ole Hwy

Waimanalo, HI 96795

October 5, 1998

Major General Edward Richardson
3949 Diamond Head Road
Honolulu, HI 96816

Dear Major General Edward Richardson, Aloha!

The Board of Directors and General Membership of the Waimanalo Hawaiian Homes Association extends their most appreciative mahalo to you and your staff for the presentation of the proposed Hawaii National Guard Training Academy at the Bellows Air Force Station. This letter is to express our support for your efforts in the construction and proposed use of that facility for the Hawaii National Guard here in Waimanalo.

Our Association represents nearly 600 households living on the Waimanalo Hawaiian Homelands and has numerous beneficiaries currently active or has served in the National Guard here in Hawaii. The benefits of having the Training Facility will be a welcome addition, not only to our homesteaders, but also to all the residents of Waimanalo.

The National Guard has always played an integral and important role within our community and most recently assisting our Community Clean up in December 1997. With the use of your vehicles, the trash and heavy discarded materials were collected from homes on the homestead whose residents were unable to dispose of it themselves either because of no means or due to their age. We extend our deepest appreciation and mahalo for your role in that.

As you pursue your efforts in the planning and the construction of your new facility, please be assured that our support will be with you. We also ask that other organizations within Waimanalo support your efforts and that this letter will be sent to other governmental representatives and its agencies to show our agreement to this proposal.

If our Association or I could be of further assistance to you or your staff, please do not hesitate to call us. Should you have any questions or concerns, please call me at my business cellular phone, 226-7288 or my residence at 259-9361. Mahalo Nui Loa.

'O au me ka ha'aha'a



Paul P. Richards
President
Waimanalo Hawaiian Homes Association

Appendix C

Comment Letters and Responses

C1-State Office of Hawaiian Affairs;
C2-State Office of Environmental Quality Control.

PHONE (808) 594-1888

FAX (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

January 8, 1999

Department of Defense.
Hawaii Army National Guard
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495
Attention: Captain Charles Anthony

EIS 271

RE: Draft Environmental Assessment for a Regional Training Institute Complex, Hawaii Army National Guard 298th Regiment, Bellows Air Force Station, Waimanalo, O'ahu, Hawaii.

Dear Sir:

We have reviewed a copy of the draft Environmental Assessment (DEA) for the Establishment of a Regional Training Institute for the Hawaii Army National Guard 298th Regiment. The Hawaii Army National Guard (HIARNG) and the Hawaii Department of Defense proposes to construct a regional training and recreational facility at Bellows Airforce Station, Waimanalo, O'ahu, Hawaii. The DEA states that HIARNG will not prepare an Environmental Impact Statement and anticipates a Finding of No Significant Impact for the project. The Office of Hawaiian Affairs (OHA) urges reconsideration of this conclusion for following reasons.

The DEA lacks basic information about the project necessary to permit an informed comment. No descriptions or diagrams accompany the DEA. Instead Section 2.0 "Description of the Proposed Action" states that development plans are now in the conceptual stage, but the project will include educational, administrative, housing and physical fitness areas. No detailed information on the nature and extent of the construction anticipated for the project is included in the DEA. For example there is no information on the size of the project, the scope of contemplated excavation activities or the relative allocation of acreage between the four general areas of the project. Indeed, it is unclear whether the purpose of the project is military training or recreation.

Department of Defense
Hawaii Army National Guard
Attention: Captain Charles Anthony
Page two

Moreover, none of the basic studies purportedly supporting the contemplated "no effect" determination are included in the DEA. Instead, the DEA includes vague references to biological and other experts or studies but fails to append such studies to the DEA. For example Section 4.7 states that "[b]iologist Phillip L. Bruner surveyed BAFS for birds and wild animals". However, Mr. Bruner's survey is not a part of the DEA. Verification of DEA conclusions based on the study is impossible absent information on the timing, methodology, scope and analysis of Mr. Bruner's study.

The lack of a socioeconomic study in the DEA is another serious omission. No analysis on the socioeconomic impacts of the proposed project are included in the DEA. Instead, the DEA substitutes a statistical overview of the local community. Waimanalo is predominately a native Hawaiian and rural community. Increased military presence may result in a significant adverse impact on the character of the community. The actual nature of this impact will in large measure turn on whether the increased presence of military personnel in the community is the result of a proposed military training facility or a recreational facility. In summary, the DEA's conclusion that the project will have "no effect" is unsupported.

Of extreme concern to this office is the section on Cultural Resources. Previous archaeological studies of Bellows Airforce Base indicate that it contains some of the most important archaeological sites in the State of Hawaii. The DEA acknowledges that at least two cultural sites exist within the project area. However, no cultural report is included in the DEA. Underscoring the general lack of supporting data, the DEA is unable to even state whether the two known sites are eligible for inclusion in the National Register of Historic Sites.

The DEA states that:

"[p]reliminary recommendations for management of the buried cultural deposit include preservation, and determination of National Historic Register (NHR) status. If HIARNG cannot preserve the site, IARII recommends data recovery".

This statement presents preservation and data recovery as equal mitigation measures. They are not. Data recovery allows for the destruction of a site once it has been studied and documented. Destruction of any site is a serious consequence, particularly when the underlying analysis resulting in the "destruction" decision is inadequate. If a site is eligible for the NHR, its destruction is a "negative effect" requiring the preparation of an EIS. On this score, the cultural/archaeological conclusions are defective for two reasons. First the DEA fails to make a determination on eligibility. Second, it concludes that there is no negative impact based on an incorrect assumption that preservation and data recovery are synonymous.

Department of Defense
Hawaii Army National Guard
Attention: Captain Charles Anthony
Page three

Finally, the process of determining the significance of the sites and the effects of the project on the native Hawaiian community is flawed. The following steps must be taken before any determination as the effects of the project can be made.

- An archaeological survey of the project area must be completed.
- A determination of eligibility for the NHR register must be completed for cultural/archaeological sites found within the project area.
- A letter from the State Historic Preservation Officer confirming a site's status for eligibility on NHR must be included in the documentation.
- Meaningful, pre-decision consultation with OHA, as required by the National Historic Preservation Law, must occur.

Until all of the above steps have been completed a "Finding of No Significant Impact" is not possible. We urge the withdrawal of the DEA until all of these measures have been met. If you have any questions concerning our comments, please contact Lynn Lee, EIS Planner at 594-1936.

Sincerely,



Colin Kippen
Deputy Administrator



C. Sebastian Aloit
Acting Land and Natural Resources
Division Officer

cc: Board of Trustees
Office of Environmental Quality Control
DLNR, State Historic Preservation Division
Waimanalo Neighborhood Board

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816-4495

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL
ORLAN L. PETERSON, JR.
MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

March 15, 1999

Engineering Office

Mr. Collin Klippen
Mr. C. Sebastian Aloom
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

Dear Mr. Klippen and Mr. Aloom:

Subject: Draft Environmental Assessment (EA), Establishment of
the Regional Training Institute Complex, Hawaii Army
National Guard, 298th Regiment, Bellows Air Force
Station, Waimanalo, Oahu, Hawaii, November 19, 1998

Thank you for your letter of January 8, 1999, regarding the subject
Draft EA.

Our responses to your comments are enclosed. As referenced in our
letter of February 12, 1999, we will meet with your office to discuss
these issues in detail if requested.

We trust that this letter, in conjunction with the changes made to the
Final EA, adequately addresses your concerns.

If there are any questions, please have your staff contact Lieutenant
Colonel Ron Swafford, Environmental Protection Specialist, at
733-4214.

Sincerely,

A handwritten signature in black ink, appearing to read "E.V. Richardson".

Edward V. Richardson
Major General
Hawaii Air National Guard
Adjutant General

Enc.



Draft Environmental Assessment
Establishment of the Regional Training Institute Complex, Hawaii Army
National Guard, 298th Regiment, Bellows Air Force Station, Waimanalo,
Oahu, Hawaii, November 19, 1998

Comment: "The DEA lacks basic information about the project."

Response: The proposed project to build a new military training institute is in the design phase. The proposed design consists of five buildings (classrooms, auditorium, mess hall, administration and billets), parking facilities, access road, and recreational areas. The current configuration of buildings contains a total of 76,750 square feet. Although the total number of square feet will not change by more than 15 percent, the shape and location of the buildings may shift within the 48-acre parcel. Since the engineers have not finished the soil survey, the HIARNG cannot estimate the extent of excavation at this time. As requested, the Final Environmental Assessment (FEA) will include a large-scale map of the proposed buildings and recreational facilities.

Comment: "None of the basic studies purportedly supporting the contemplated 'no effect' determination are included in the DEA."

Response: In December 1995, the Navy released a *Final Environmental Impact Statement (FEIS), Land Use and Development Plan, Bellows Air Force Station*. This FEIS covers all proposed land use changes and development for BAFS (1,568 acres), including the establishment of a permanent HIARNG training facility on the proposed 48-acre parcel. The referenced studies, including Dr. Bruner's biological survey, appear in the 1995 FEIS. Since the public previously reviewed these studies, the HIARNG chose not to include them as appendices.

Comment: "The lack of a socioeconomic study in the DEA is another serious omission."

Response: An extensive socioeconomic assessment for all proposed changes at BAFS appears in the 1995 FEIS. The HIARNG currently has a military training institute at BAFS. The proposed action is to move the existing training institute from one part of BAFS to the former Communications Area. The new RTI will serve 1,200 people per year, the same number as the old facility. Thus, the proposed action will not alter the level of military presence in the Waimanalo community. The FEA includes letters of support from both the Waimanalo Neighborhood Board and the Waimanalo Hawaiian Homes Association.

Comment: "Of extreme concern to this office is the section on Cultural Resources."

Response: International Archaeological Research Institute, Inc. (IARII), conducted a surface and subsurface inventory level archaeological survey of the proposed RTI parcel (November 2-11, 1998). IARII identified three historic properties during the inventory: a buried remnant cultural deposit located approximately 2.4 m. below the runway fill; two World War II-era B-17 bomber revetments; and, a wooden fence. Both the cultural deposit and the World War II revetments are probably eligible for the National Historic Register. The wooden enclosure is not significant. IARII's post-field letter report (Appendix A in the FEA) provides preliminary recommendations for treatment of the historic properties recorded during the survey.

The cultural deposit lies approximately 9 ft. below the surface in the recreation facilities area. This area will contain surface structures only, such as baseball fields and a running track. This allows HIARNG to avoid any impacts to the deposit. Additionally, the HIARNG Cultural Resources Manager, as recommended by the State Historic Preservation Officer (SHPO), will monitor all construction activities at the proposed RTI site. HIARNG, in conjunction with the State Historic Preservation Division, will prepare a data recovery plan if the proposed action disturbs any cultural sites. The FEA includes a letter from the SHPO in Appendix B.

HIARNG plans to re-use the WW II revetments by incorporating these structures into the training facility. The revetments will be hand-cleared during the construction of the recreation area, restored, and marked with signage explaining their use during World War II. Again, the HIARNG Cultural Resources Manager will monitor construction and restoration activities.

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

236 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

January 22, 1999

Lt. Col. Richard Young
Department of Defense
3949 Diamond Head Road
Honolulu, Hawaii 96816

Attn: Jane Yamamoto

Dear Lt. Col. Young:

Subject: Draft Environmental Assessment (EA) for Bellows AFS Regional Training
Institute Complex, Waimanalo

Please include the following in the final EA:

1. In the final EA please state whether the zoning will be changed from federal to public facility.
2. Please include a map that clearly shows the following in relation to the project: Waimanalo stream, Kahawai Stream, coastal hazard areas, any other sensitive areas
3. Describe whether storm water runoff from the project site would impact any streams or nearshore waters.
4. Please consult with State Historic Preservation Division of the Department of Land and Natural Resources about archeological resources and include copies of any correspondence in the final EA.
5. Please provide a bigger site plan and label existing buildings, future buildings and any other facilities.

If you have any questions, please call Nancy Heinrich at 586-4185.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary Gill".

for GARY GILL
Director

BENJAMIN J. CAYETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE ADJUTANT GENERAL
3949 DIAMOND HEAD ROAD, HONOLULU, HAWAII 96816-4495

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COLONEL
DEPUTY ADJUTANT GENERAL

March 15, 1999

Engineering Office

Mr. Gary Gill, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Gill:

Subject: Draft Environmental Assessment (EA), Establishment of
the Regional Training Institute Complex, Hawaii Army
National Guard, 298th Regiment, Bellows Air Force
Station, Waimanalo, Oahu, Hawaii, November 19, 1998

Thank you for your letter of January 22, 1999, regarding the subject
Draft EA.

Our responses to your comments are enclosed. We trust that this
letter, in conjunction with the changes made to the Final EA,
adequately addresses your concerns.

If there are questions, please have your staff contact Lieutenant
Colonel Ron Swafford, Environmental Protection Specialist, at 733-
4214.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed. Richardson".

Edward V. Richardson
Major General
Hawaii Air National Guard
Adjutant General

Enc.



Draft Environmental Assessment
Establishment of the Regional Training Institute Complex, Hawaii Army
National Guard, 298th Regiment, Bellows Air Force Station, Waimanalo,
Oahu, Hawaii, November 19, 1998

Comment: "In the final EA please state whether the zoning will be changed from federal to public facility."

Response: The Department of Land Utilization (DLU) classifies the proposed site as F1, or Military-Federal land. No City and County zoning changes will occur as a result of the proposed action.

Comment: "Please include a map that clearly shows the following in relation to the project: Waimanalo Stream, Kahawai Stream, coastal hazard areas, any other sensitive areas."

Response: In addition to the general map in the DEA, the Final Environmental Assessment (FEA) will include four maps: a large-scale site plan, a flood hazards map, a stream and wetland map, and a cultural resources map.

Comment: "Describe whether storm runoff from the project site would impact any streams or nearshore waters."

Response: According to HIARNG's civil engineer, the proposed project would not significantly affect the total amount of impermeable surface on the 48-acre parcel. The proposed action would create buildings and parking lots on a small percentage of the parcel, while eliminating impermeable portions of the existing runway. In short, the net effect would not significantly alter the current levels of infiltration or runoff. Furthermore, the December 1995 *Final Environmental Impact Statement (FEIS), Land Use and Development Plan, Bellows Air Force Station*, contains a quantitative drainage report for all of BAFS. This survey assesses the impact of various development projects, including the National Guard's RTI facility, and concludes that the proposed HIARNG action would not significantly affect surface runoff.

Comment: "Please consult with the State Historic Preservation Division of the DLNR about archaeological resources and include copies of any correspondence."

Response: Before the 30-day comment period, the HIARNG provided a copy of the DEA to the SHPD, and received a comment letter dated December 18, 1998. According to SHPD records, "no historic sites are known to be present within the 48-acre parcel." A copy of their letter appears in Appendix B of the FEA.

Comment: "Please provide a bigger site plan and label existing buildings, future buildings and any other facilities."

Response: No buildings currently exist on the proposed site. As mentioned above, we will include a site plan with building and facility labels.