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STATE OF HAWAII
DEPARTMENT OF PUBLIC SAFETY
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RECEIVED

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No. _____

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

June 25, 1996

The Honorable Gary Gill
Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

Dear Director Gill:

This letter is regarding the Negative Declaration for Proposing Housing Facility, Hawaii Community Correctional Center, Hilo, Hawaii, TMK 2-3-23: 5, Third Division.

The Department of Public Safety has reviewed the comments received on the Draft Environmental Assessment during the 30-day public comment period, which began on April 23, 1996, and considered the comments received on the proposed project at three community meetings. The agency has determined that this project will not have significant environmental effects and has issued a Negative Declaration. Please publish this notice in the July 8, 1996 Environmental Notice.

We have enclosed a completed Environmental Notice Publication Form and four (4) copies of the Final EA. Should you have any questions regarding this submittal, please contact our consultant, Mr. Glen Koyama of Belt Collins Hawaii at 521-5361.

Aloha,


George Iranon
Director

Enclosures: Negative Declarations (4 copies)
The Environmental Notice Publication Form

c: Glen Koyama, Belt Collins Hawaii
Stan Yasumoto, Architects Hawaii, Ltd.
DAGS, Public Works

1996-07-08-HI-PEA-Housing Facility, Hawaii
Correctional Center, Hilo

JUL 8 1996

FILE COPY

**FINAL
ENVIRONMENTAL ASSESSMENT**

**PROPOSED HOUSING FACILITY
HAWAII COMMUNITY CORRECTION CENTER**

Hilo, Hawaii



Proposing Agency

**Corrections Division
Department of Public Safety
State of Hawaii**

Consultant

**Belt Collins Hawaii
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406**

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I INTRODUCTION

Purpose

The Corrections Division of the Department of Public Safety, State of Hawaii, is proposing to develop a new housing unit for pre-trial detainees on the grounds of the Hawaii Community Correctional Center (HCCC) in Hilo, Hawaii. The property is situated at the corner of Komohana and Punahale Streets and is identified as Tax Map Key 2-3-23: 5, Third Division (see Figures 1 & 2).

The State of Hawaii's Environmental Review Process was developed in 1974 to ensure that environmental consequences of proposed actions are considered. As part of this process, which is defined under Hawaii Revised Statutes (HRS) Chapter 343, an environmental analysis must be conducted to identify any potential impacts (environmental and socioeconomic) that could result from a proposed action initiated by a state, county or private-sector entity requiring State or County approval. Because the proposed action is initiated by a State agency and will affect State land, HRS Chapter 343 requirements apply.

Public notification and review processes are also required under HRS Chapter 343. Public notification and review are facilitated through the Office of Environmental Quality Control (OEQC).

Proposing Agency

The proposing agency is the Corrections Division, Department of Public Safety, State of Hawaii. Its address is 919 Ala Moana Boulevard, 4th Floor, Honolulu, Hawaii 96814.

Accepting Authority

The proposed project is an agency action that is being proposed by the Corrections Division. This agency is responsible for assessing the impacts of the proposed project and for determining whether an Environmental Impact Statement (EIS) is or is not required. If an EIS is required, the Governor of the State of Hawaii is responsible for accepting the EIS. If an EIS is not required, then a Negative Declaration is issued by the Corrections Division.

Upon acceptance of an EIS or issuance of a Negative Declaration, the proposing agency can proceed to file for a building permit with the Planning Department of the County of Hawaii.

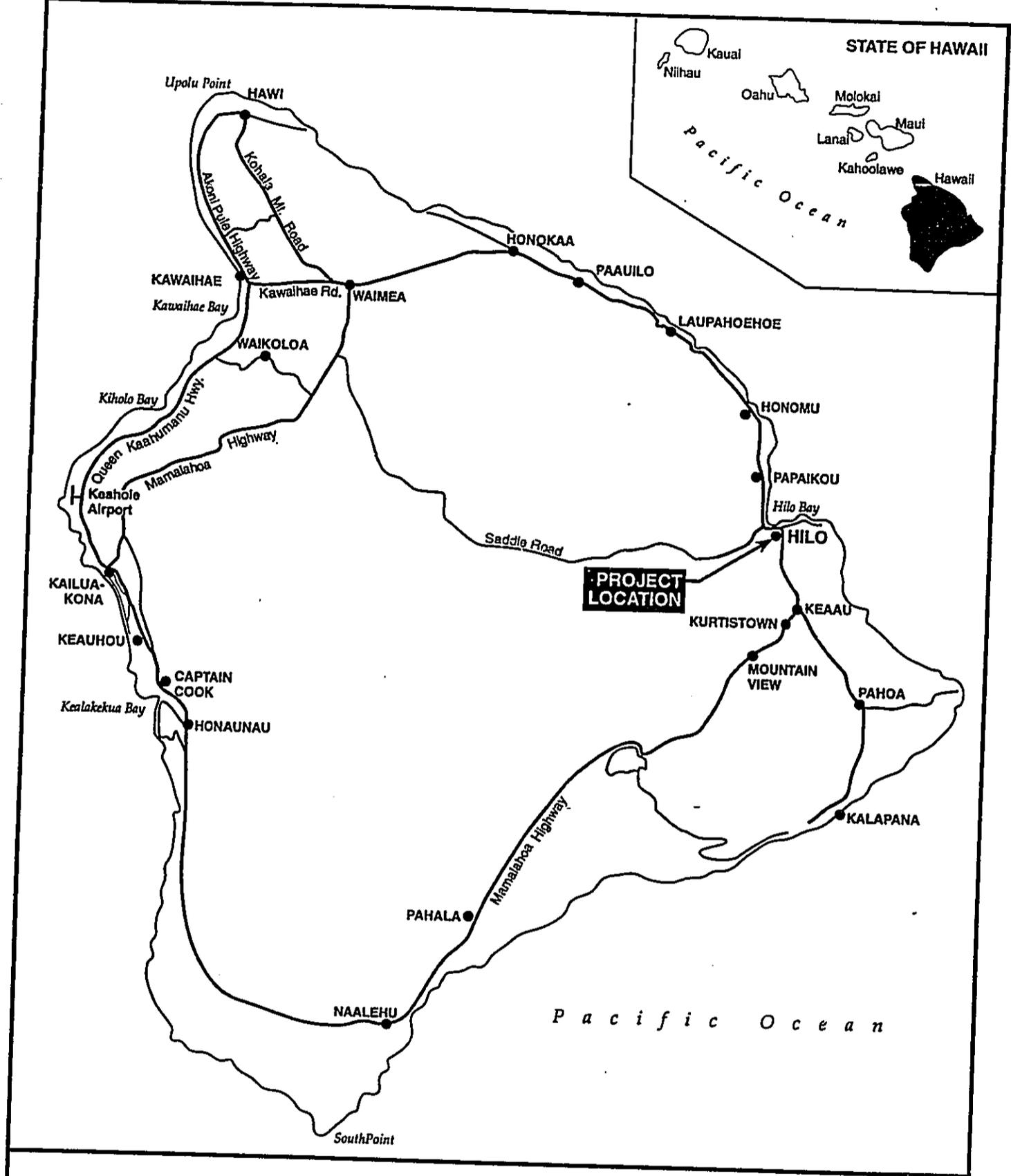
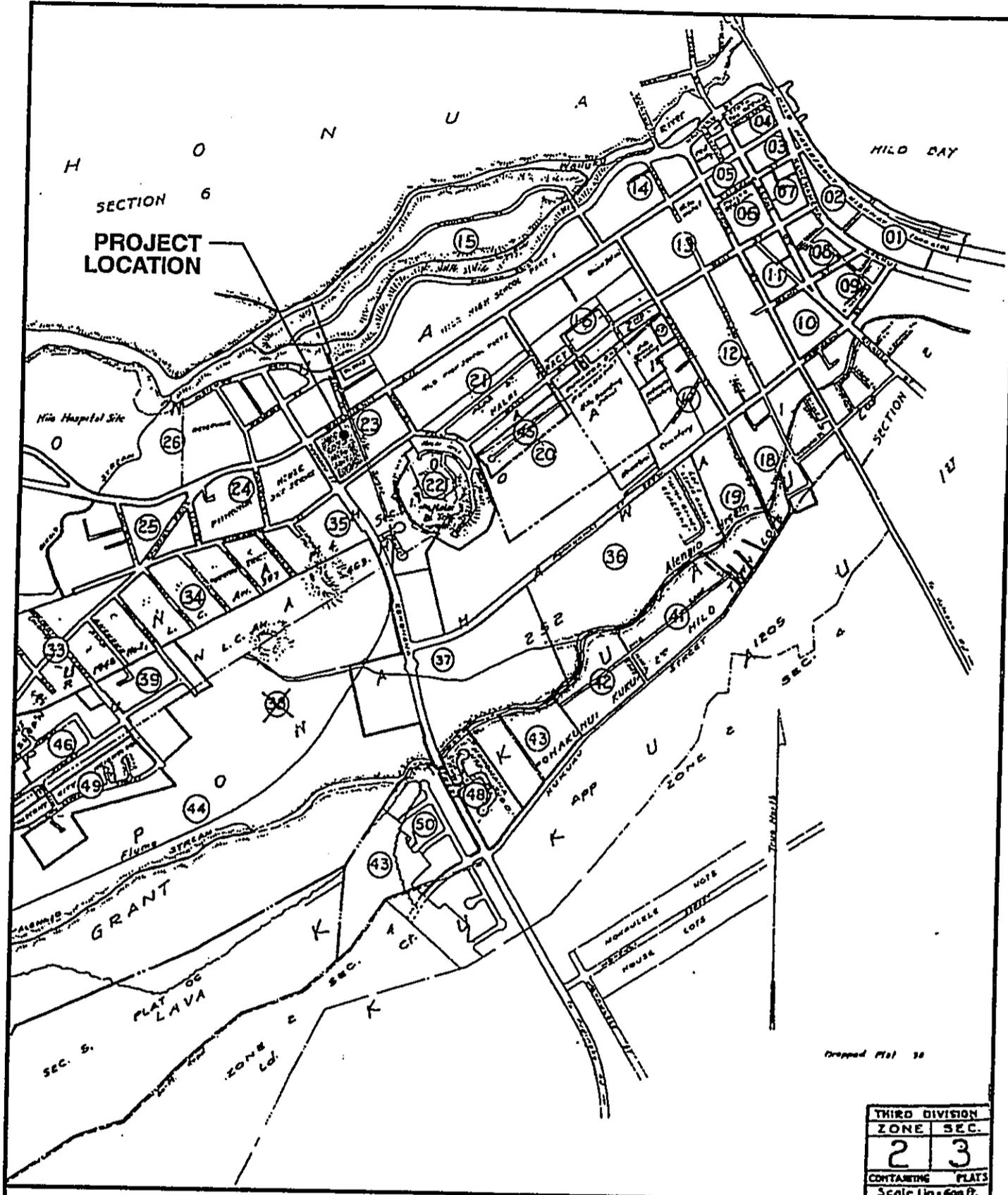


Figure 1
PROJECT LOCATION
New Housing Unit
Hawaii Community Correctional Center
Hilo, Hawaii
Belt Collins Hawaii, June 1996



THIRD DIVISION	
ZONE	SEC.
2	3
CONTAINING 3 FLATS	
Scale 1 in = 600 ft.	

Figure 2
PROJECT VICINITY-TAX MAP KEY
 New Housing Unit
 Hawaii Community Correctional Center
 Hilo, Hawaii
 Belt Collins Hawaii, June 1996

 NORTH
 0 300 600
 SCALE IN FEET

II. CONSULTED AGENCIES

State Agency

- o Department of Accounting and General Services
- o Judiciary - Court System
- o Office of the Public Defender
- o State Historic Preservation Division
- o Department of Education (Hilo High School and Hilo Intermediate School)

County Agency

- o Police Department
- o Prosecuting Attorney
- o Big Island Task Force
- o Planning Department
- o Public Works Department
- o Department of Water Supply

Councilmembers and State Legislators representing the Hilo area were also contacted and consulted on this project.

III. TECHNICAL DESCRIPTION OF THE PROPOSED ACTION

Statement of Objective

The prison system in the State of Hawaii is currently experiencing a severe shortage of bed space. This shortage is forcing the Corrections Division to take drastic measures such as doubling-up of inmates in crowded cells, transporting inmates to available facilities in other states, and early releases. This statewide condition has been documented by the local media through newspaper and television coverage.

The HCCC serves the island of Hawaii which has a population of approximately 120,317 (1990 U.S. Bureau of the Census). Such a facility serving this population would normally need about 260 beds based on studies that show an incidence rate of 217 incarcerations per 100,000 population. The HCCC complex was designed for 42 beds, but is currently accommodating 130 to 140 inmates. Together with its Hale Nani facility which is located outside of Hilo and houses inmates in its furlough program, the total number of existing beds is 82, which demonstrates a serious need to provide additional beds at the Hilo facility.

The Kulani Correctional Facility, which is located south of Hilo about 18 miles off of Kanoelehua Avenue (Volcano Highway), is a low-security complex that houses inmates from the Big Island as well as the neighbor islands. Its bed inventory thus is not devoted strictly to Big Island inmates.

Hawaii Community Correctional Center
Operations:

HCCC is a medium-security facility that houses detainees from around the island including Kona, Kau, Puna, and Kohala. These detainees include persons awaiting trial or sentencing. HCCC also accommodates those who cannot post bail, are serving time for contempt of court or are convicted of a misdemeanor offense which carry a one year or less jail time. Sentenced felons, serving more than one year, await transfer to an appropriate program or facility elsewhere.

Sentenced individuals are initially incarcerated and intake processed at HCCC's Punahale Building. They are then assigned a cell or a facility. As a practice, neighbor island inmates are not assigned to HCCC. For their daily routine, inmates are provided food services, medical care and programming activities which include library, education and recreational opportunities.

Visiting hours are Saturdays, Sundays and holidays from 8:00 a.m. to 2:00 p.m. Weekday visits are allowed only on special request. Visitors are permitted to park in any of the three on-site parking areas which also serve as employee and State vehicle parking.

HCCC has a staff of about 89 employees in 63 post positions including administrative personnel, adult corrections officers (ACOs), program workers, medical staff, food service personnel, and building maintenance technicians. The staff works during the normal day-time hours, but the ACOs are assigned to three shifts covering the regular 24-hour day.

Facilities:

There are five buildings within the HCCC complex (see Figures 3 & 4). The Punahale Building houses the administrative functions, an intake processing area, housing facilities (22 beds), program areas and medical services. The Waianuenue Building contains housing for 20 beds and HCCC's food services. In HCCC's program building, there are a library and educational room. Outside of the building is a recreational area to service inmates in the Waianuenue Building. At the Waianuenue Avenue - Komohana Street corner of the property, on the original prison grounds, is the old Hilo Jail which no longer houses inmates but serves as an

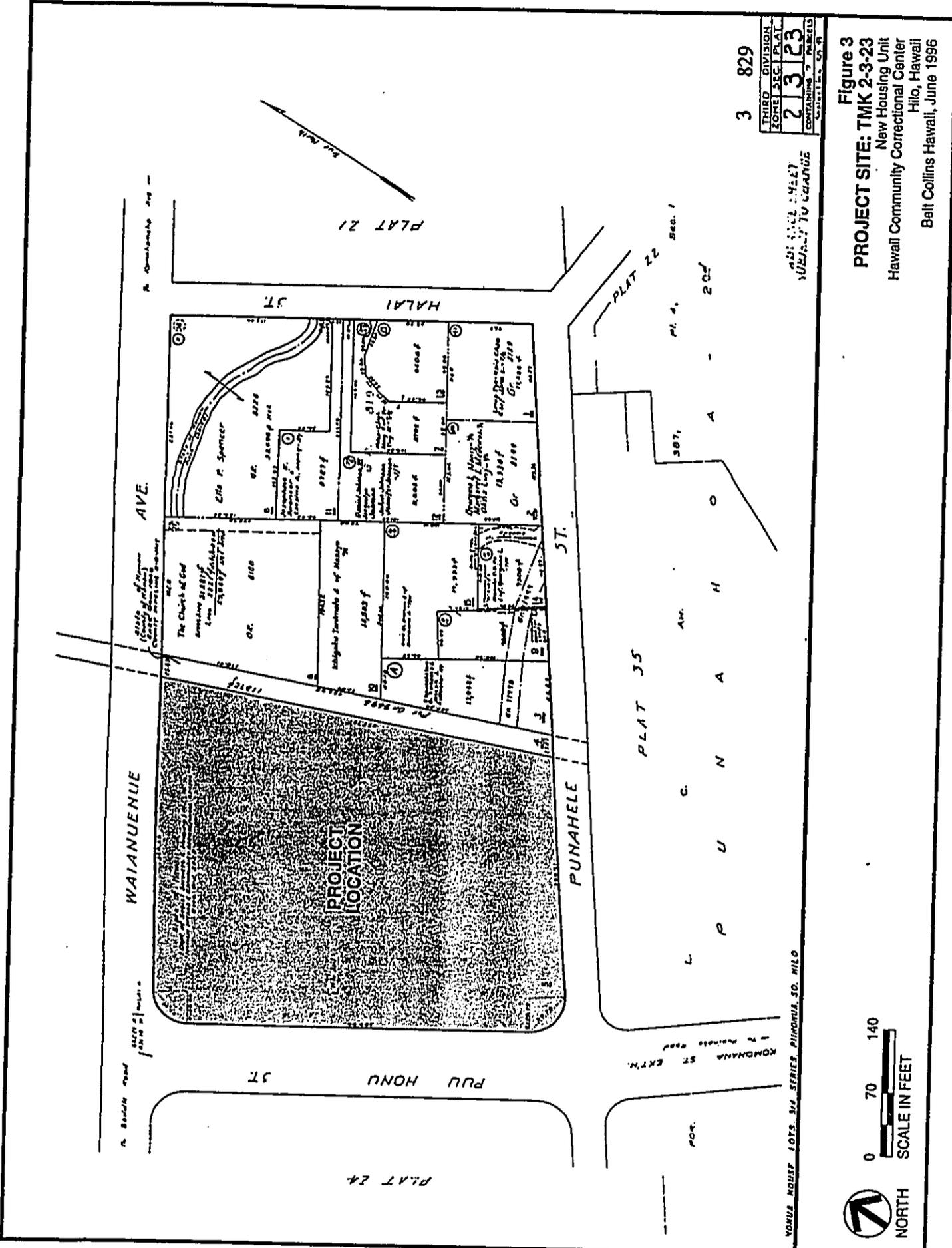


Figure 3
PROJECT SITE: TMK 2-3-23
 New Housing Unit
 Hawaii Community Correctional Center
 Hilo, Hawaii
 Belt Collins Hawaii, June 1996



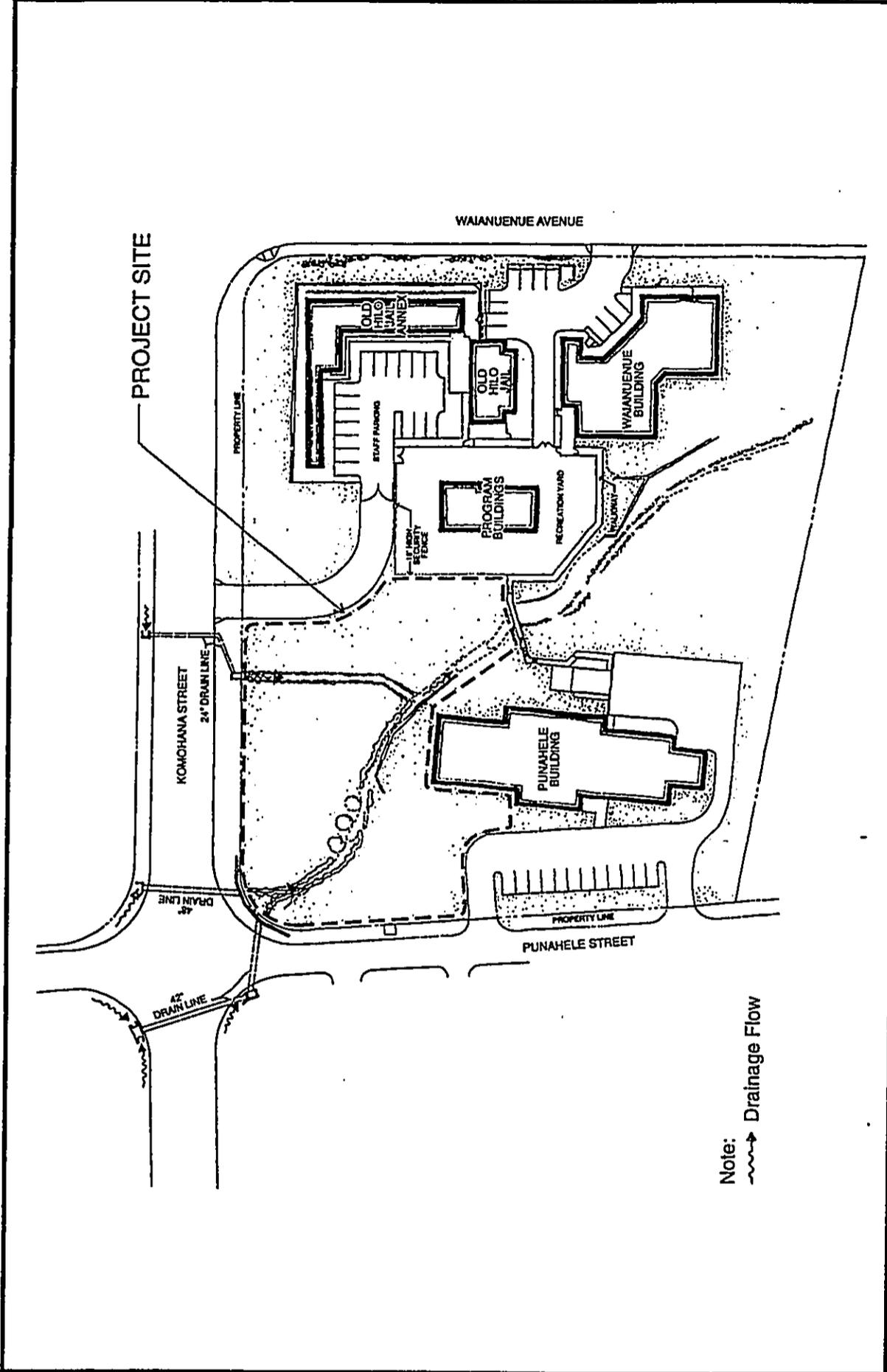


Figure 4
EXISTING SITE
 New Housing Unit
 Hawaii Community Correctional Center
 Hilo, Hawaii
 Belt Collins Hawaii, June 1996



Note: Drainage Flow

office for HCCC's accounting and general business operations, program services and maintenance operations. Adjacent to the old Hilo Jail is the old prison annex which is now being used as a storage area.

The complex has the appearance of a college campus. There are large grass lawns and individual buildings connected by walkways; some enclosed with security fences and others opened to the landscaped grounds. There are no perimeter security fences on the property.

Three parking areas, with a total of 40 stalls, are located within the HCCC complex with access from Waiianuenue Avenue, Komohana Street and Punahale Street. Employees and visitors alike, are permitted to use any of the parking areas.

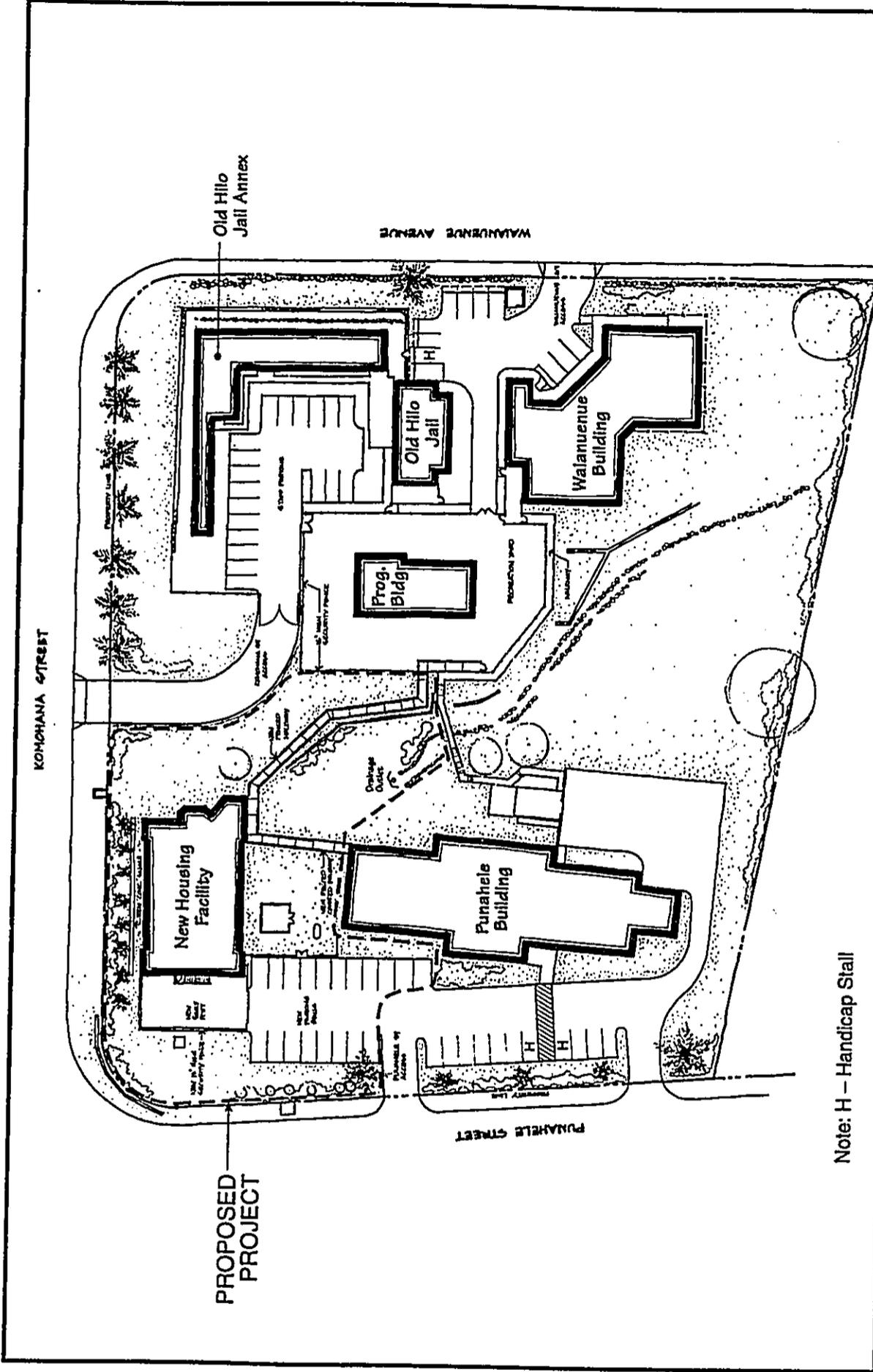
Background

Since 1993 when appropriations from the State Legislature were granted, the Corrections Division planned a new housing facility for pretrial detainees on the Big Island. Such a long-overdue facility is needed to accommodate those who are now being housed at the HCCC site. An increase in detainees and the overcrowded conditions in other facilities have contributed significantly to the overcrowded conditions at HCCC.

As described in Section VII of this document, other sites were first considered for the new housing facility. However, due to mitigating circumstances, the Hilo property is currently the best option available for the new housing unit. Conceptual plans were begun in early 1996 when the Hilo site was selected. Plans are now being refined and the environmental studies have finally been completed. As part of the planning process, three public informational meetings on the project have been held. Public comments and concerns from these meetings have been noted and are addressed in this assessment. Following this environmental review stage, the proposed project will proceed with the building permit review process.

Project Description

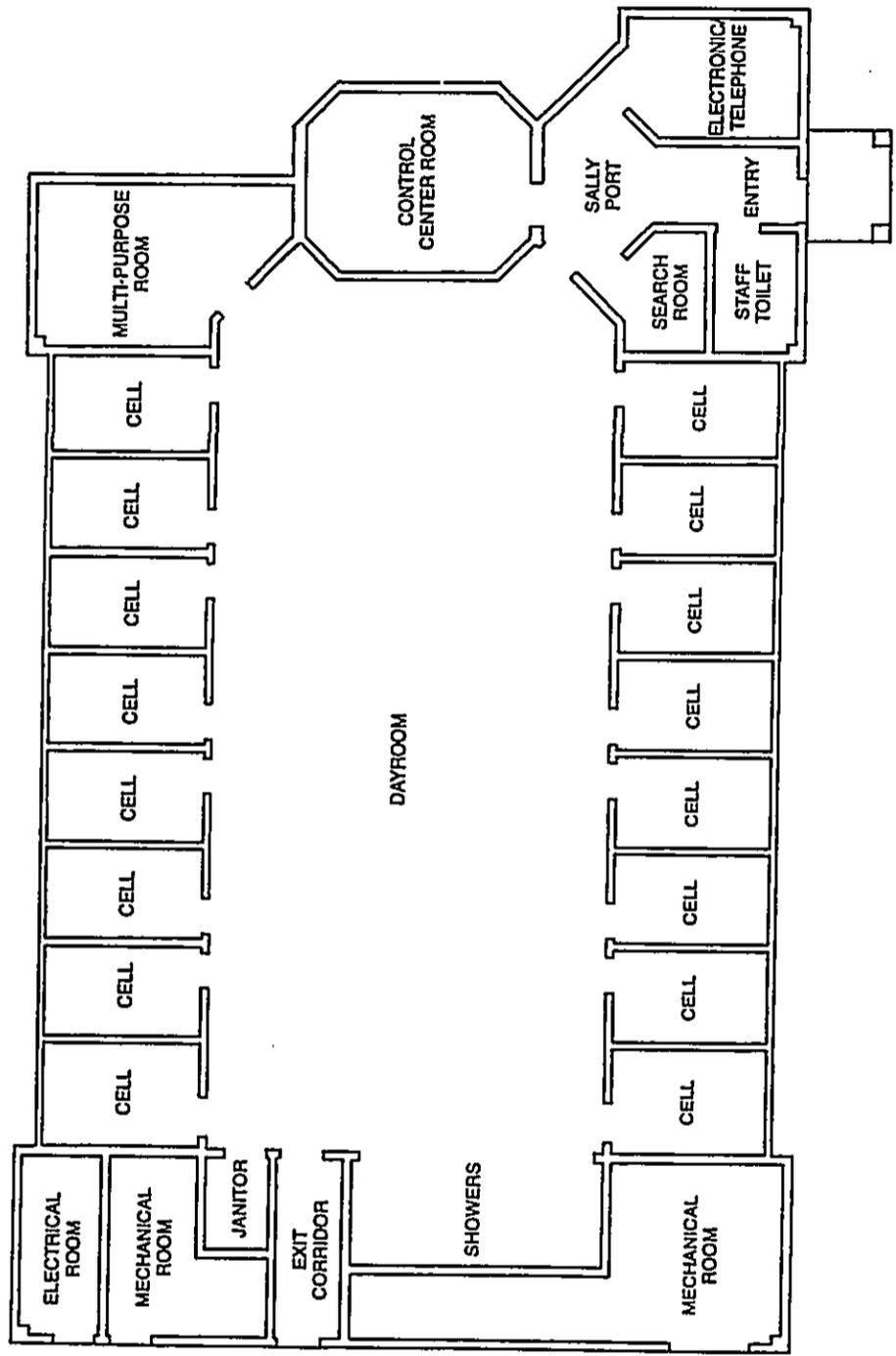
Plans for the pre-trial housing facility call for providing 64 beds (see Figures 5 to 8). The two-story, approximately 12,800 sq. ft. facility, will be situated at the Komohana Street - Punahale Street corner of the HCCC complex. It will contain double-bed cells, a dayroom space, a control room, a search room, multi-purpose room, central showers, staff toilet, and mechanical/electrical rooms. The building will be constructed of concrete masonry unit (CMU) with standard seam metal roofing. On the south side of the building will be a sally port with security fencing for delivery trucks. Similar to the existing HCCC complex, there will be no security fencing on the perimeter of the new building. It will be self-contained and internally secured.



Note: H - Handicap Stall



Figure 5
PROPOSED SITE PLAN
 New Housing Unit
 Hawaii Community Correctional Center
 Hilo, Hawaii
 Belt Collins Hawaii, June 1996



Note: Second floor plan is similar to ground level floor plan except dayroom is an open area to the ground level.

Figure 6
GROUND LEVEL FLOOR PLAN
 New Housing Unit
 Hawaii Community Correctional Center
 Hilo, Hawaii
 Belt Collins Hawaii, June 1996



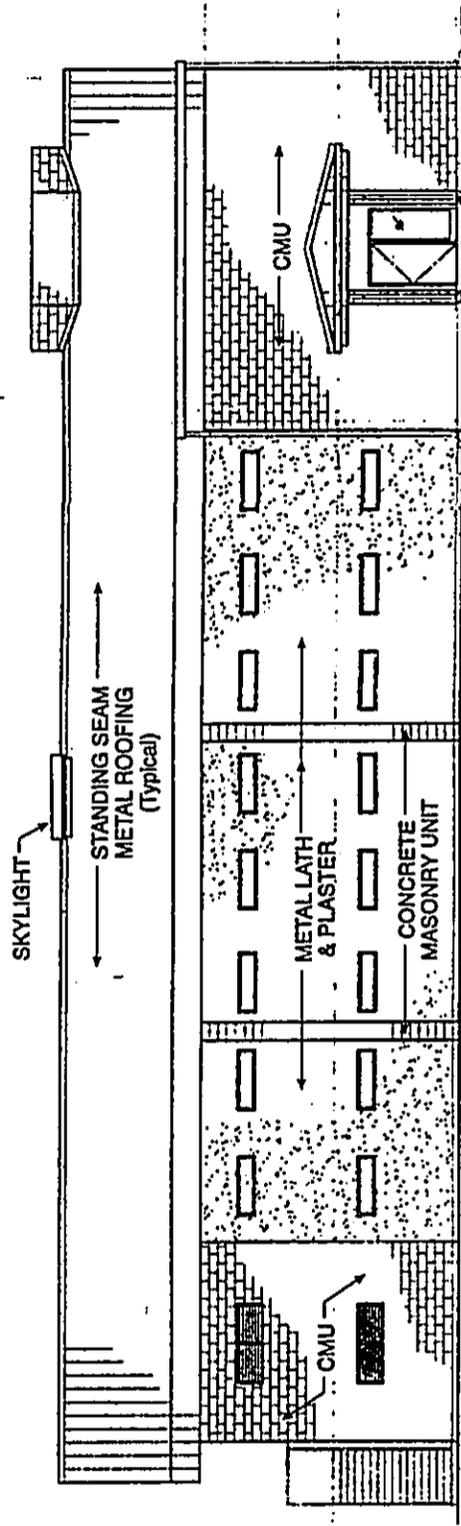


Figure 7
EAST BUILDING ELEVATION
New Housing Unit
Hawaii Community Correctional Center
Hilo, Hawaii
Belt Collins Hawaii, June 1996



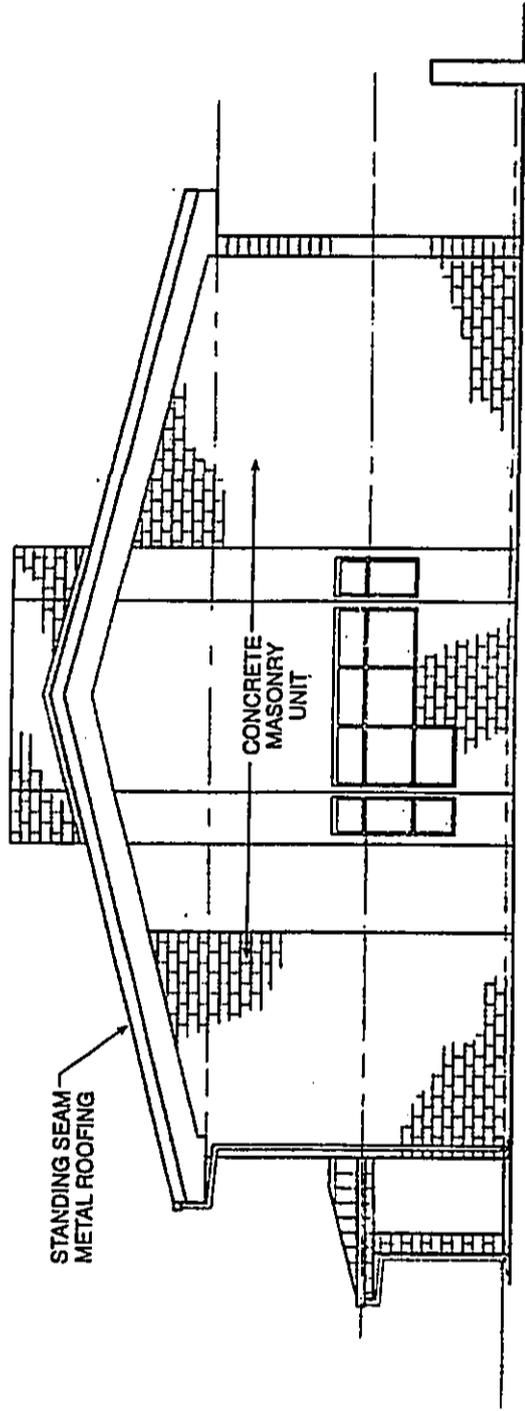


Figure 8
SOUTH BUILDING ELEVATION
New Housing Unit
Hawaii Community Correctional Center
Hilo, Hawaii
Belt Collins Hawaii, June 1996



The new housing facility will provide accommodations for persons awaiting trial or sentencing. It will accommodate those who cannot post bail, are serving time for contempt of court, are incarcerated for lesser crimes involving jail terms of one year or less, or are sentenced felons awaiting placement elsewhere in appropriate programs or facilities.

The project will also contain 19 new parking stalls for employees and visitors, and ancillary facilities including a new fenced walkway and landscaping. Drainage improvements will involve converting two surface drainage channels through the site into an underground culvert system.

Project Schedule

The new facility is scheduled to begin construction in the third quarter of 1996 and be completed in the summer of 1997. Construction is expected to occur in one phase.

Development Cost

The estimated cost of construction, including building, utilities, landscaping and parking, is \$2.8 million. The funds are expected to come from the State's Capital Improvement Program (CIP) funds.

IV. RELATIONSHIP TO STATE AND COUNTY LAND USE POLICIES

Hawaii State Plan

Section 226-26 of The Hawaii State Plan, entitled Objectives and Policies for Socio-Cultural Advancement -Public Safety, states that planning shall be directed toward the assurance of public safety and adequate protection of life and property for all people. It further states that to achieve public safety objectives, it shall be the policy of the State to ensure that public safety programs are effective and responsive to community needs and to support criminal justice programs aimed at preventing and curtailing criminal activities.

The proposed project is intended to improve the current bed shortage situation in the state's existing correctional facilities system. Further, in being responsive to community needs, HCCC has established a community resource group that will provide valuable community input on current and future operations at the Hilo facility.

State Land Use District

The project site is located in the Urban District as classified by the State Land Use Commission. The new pretrial housing facility is a permitted use in this district.

County General Plan

The Land Use Pattern Allocation Guide (LUPAG) Map of the County General Plan designates the project site as Medium Density Urban Development. This land use designation allows medium density residential, village and neighborhood commercial, and related uses. The proposed project falls under "related uses" and is consistent with the LUPAG Map.

County Zoning

The County zoning is RS-7.5 Single Family Residential District. The proposed project is a permitted use under Section 25-51 of the County Zoning Code which states that "communication, transmission, and power lines of public and private utilities and governmental agencies are permitted uses within any district. Community, public, and public service buildings are permitted uses provided they conform to the General Plan". It is noted that the proposed project is being sponsored by a government agency and that it involves a public building that conforms with the land use as shown on the County LUPAG Map.

Coastal Zone Management Program

The federal Coastal Zone Management (CZM) program is administered in Hawaii by the Office of State Planning under Chapter 205A, HRS, and affects all projects including county, state and federal projects in the coastal zone but not on federal land.

The proposed action is located outside of the Special Management Area (SMA) as designated by the County of Hawaii and therefore is not subject to the SMA Rules and Regulations. However, the entire island is located in the Coastal Zone Management area, and therefore, the proposed project must demonstrate consistency with the objectives and policies of the CZM program. Each of the ten CZM program objectives and policies are presented in the following subsections.

Recreation Resources:

The objective and policies of "Recreation Resources" are to provide coastal recreational opportunities accessible to the public. The proposed action calls for the development of a public facility but not a public recreational facility. It will be

located more than 4,800 feet from the shoreline and at approximately the 235' elevation. The proposed project will not interfere with or reduce the size of any existing or planned coastal recreational activity or facility. It will not interfere with access to any shoreline areas or other coastal resources with recreational value.

Historic Resources:

The CZM program objective and policies concerning historic resources strive to protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the CZM area that are significant in Hawaiian and American history and culture. Consistent with this objective, the proposing agency has commissioned an archaeology consultant to conduct an archaeological study of the project site. Two historic period drainage ditches were found and subsequently recorded. Detailed descriptions of the features and the conclusion of the study findings were submitted to the State Historic Preservation Division for review and approval.

Scenic and Open Space Resources:

The CZM program strives to protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources. The proposed site is not designated a scenic or open space resource; however, the project's impact on existing scenic and open space resources are expected to be minimal. Maintaining a low profile building design and preserving open space around the building complex will combine to integrate the proposed project with the surrounding community and maintain visual corridors to the sea.

Coastal Ecosystems:

The "Coastal Ecosystems" objective and policies are to protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems. The proposed project is located more than 4,800' from the shoreline and will not impact the coastal ecosystems of Hilo Bay. Also, it will not affect any streams or drainage channels that connect directly with the ocean.

Economic Uses:

The "Economic Uses" objective and policies are to provide public or private facilities and improvements important to the State's economy in suitable locations. The proposed project is an expansion of existing facilities at the Hawaii Community Correctional Center. Its location within the existing complex will save on infrastructure and land acquisition costs.

Coastal Hazards:

The "Coastal Hazards" objective and policies are to reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution. Located more than 4,800' from the shoreline and at the 235' elevation, the proposed action will not be subject to tsunami inundation or storm waves. Two drainage ditches traverse the site, however neither is designated a floodway by the Flood Insurance Rate Maps. The proposed project will be designed to provide adequate drainage through the site and meet State and County drainage requirements. There will be no direct discharges that would pollute the water quality of adjacent streams and coastal marine waters.

Managing Development:

These CZM objective and policies are intended to improve the development review process, communication, and public participation in the management of coastal resources and hazards. Public participation is integral to the environmental analysis process required by Chapter 343, HRS, in accordance with which this document has been prepared.

Public Participation:

The objective and corresponding policies of "Public Participation" relate to stimulating public awareness, education, and participation in coastal management. The EIS for this project provides for public notification, public comments, and community input in the decision process regarding the proposed activities and associated impacts. The proposing agency will cooperate with the efforts of the different agencies to comply with the policies of this objective.

Beach Protection:

The objective and corresponding policies of "Beach Protection" relate to the protection of beaches for public use and recreation. The proposed project does not call for any beach or shoreline improvements nor any erosion-protection structures. The proposed project will not adversely affect the shoreline and beaches where recreational activities occur.

Marine Resources:

The "Marine Resources" objective and policies relate to implementing the State's ocean resources management plan. The proposed project is a public facilities but is not related to marine resources. It will not interfere with the implementation of the State's ocean resources management plan.

Special Management Area

The project site is located more than 4,800 feet from the shoreline and outside of the Special Management Area. The SMA Rules and Regulations of the County of Hawaii, thus, do not apply to this project.

V. DESCRIPTION OF THE AFFECTED ENVIRONMENT AND THE PROPOSED ACTION'S ENVIRONMENTAL, SOCIAL AND ECONOMIC CHARACTERISTICS

Regional and Community Setting

Hilo is the seat of government and largest city on the Island of Hawaii. With a population of 37,808 (1990 U.S. Census), it is the site of federal, state and county offices, major commercial businesses, industrial facilities and cultural institutions. It has a central business district, an airport, a harbor and major recreational amenities. As a site for law enforcement and correctional facilities, it has the island's police headquarters, circuit courts, district courts, prosecuting attorney office, public defender office and HCCC's main facility.

Existing Land Use

HCCC is located on a 3.82-acre parcel bounded by Komohana Street, Punahale Street and Waianuenue Avenue. It consists of a complex of five buildings that include administrative functions, intake processing area, housing facilities, special programs, medical and food services, accounting and supply operations, and storage areas. Access to the complex is from the three adjacent roadways. Parking is provided at the three accesses and each are available to employees and visitors.

Residential uses are located across Komohana Street, Punahale Street and Waianuenue Avenue. Adjacent and east of the property are two residential homes and a church. Waianuenue Avenue is a major thoroughfare that serves a number of business establishments, public institutions, recreational and cultural facilities as well as residential uses. It provides access between Hilo's central business district and mauka residential communities.

Komohana Street is the main connecting right-of-way between Waianuenue Avenue and Kawaiilani, a large residential district in South Hilo. Between these areas, Komohana Street serves a number of residential neighborhoods. Punahale Street is a local road that provides mauka-makai access through upper Hilo town.

Land Tenure

The property is identified as Tax Map Key 2-3-23: 5, Third Division, and the owner is the State of Hawaii. The land use for the property was established by Executive Order No. 2923.

Physiography

The elevation of the project site is approximately 235 feet. The property's overall topography slopes from Komohana Street to the east property line at an average grade of approximately 2 to 4 percent. The new housing facility will be located in the southwestern corner of the HCCC property in an area where the slope varies between 10 to 13 percent.

Two drainage channels traverse the project site and merge at the northeastern corner of the project area. One drainage channel is lined with rocks and mortar and the other is lined with concrete in the lower section.

Geology

The project site is located on the original lower slope of Mauna Kea, however subsequent lava flows from Mauna Loa, over centuries of time, have covered the Hilo and Puna area. The last major flow occurred in the 1980s, but did not enter the Hilo vicinity.

Climate

Temperatures are mild ranging in the lower to mid 70s with annual rainfall at over 130 inches. Winds are variable but predominantly from the northeast. These predominant wind conditions are responsible for much of the rainfall in Hilo.

Soils

According to the Soil Survey of the Island of Hawaii prepared by the Soil Conservation Service of the U.S. Department of Agriculture, the soil on the property is classified as Hilo silty clay loam (HoC). It has a surface layer of dark brown silty clay loam, about 12 inches thick, and a subsurface layer of dark-brown, dark reddish-brown, and very dark grayish-brown silty clay loam, about 48 inches thick. The surface layer is very strongly acid, and the subsoil is strongly acid to medium acid. The permeability of the soil is rapid, runoff is slow, and erosion hazard is slight.

Surface Runoff and Floods

Surface runoff occurs in two drainage channels which merge at the northeastern corner of the project site. One of the channels connects with a drainage system serving the mauka area above Komohana Street and enters the project site at the Komohana Street/Punahele Street intersection. The other drainage enters the project site from the west along Komohana Street through a rock and mortar lined channel. Runoff studies show that these drainage channels serve a small drainage basin above Komohana Street. The Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Administration shows no riverine floodways through the area.

Site improvements for the project will require grading and modification to the existing surface drainage system. The existing system will be converted into an underground network comprised of concrete culverts. Runoff from the Komohana Street/Punahele Street intersection will flow for a distance of 230 feet through a 48-inch diameter culvert, and runoff from the Komohana Street system will flow for a distance of 150 feet through a 36-inch diameter culvert. The two culverts then merge into a 30-foot long 54-inch culvert which outlets into the existing surface drainage at the center of the HCCC property and continues as a lined and unlined channel till it reaches the makai edge of the HCCC property. The outlet of the culverts will be sealed with a steel grill to prevent unauthorized entry.

The proposed culvert system is designed to accommodate surface runoff that is generated from off-site properties and partially from on-site facilities. It is engineered to accommodate a 50-year storm but is capable of handling a 100-year runoff. For storms beyond that occurrence, surface water would flow into the streets and adjacent properties.

The proposed project will generate increased runoff on the property as a result of increased impenetrable surfaces such as new building coverage, parking surfaces and pedestrian walkways. The increased runoff, however, is not expected to flow off the site. The additional flow will be discharged into an on-site dry well in the new parking area; only current runoff volumes are anticipated to leave the property.

The new housing facility will not be located in a tsunami inundation zone. According to the FIRM, the project site is outside of the Coastal High Hazard Area.

Flora

Vegetation consists primarily of lawn grass and some landscape planting along Komohana and Punahele Streets, around the adjacent buildings in the HCCC complex, and along the drainage ditch. The primary species include ti plant, palm trees and tangerine. There are no rare, endangered, or threatened species.

The proposed project will remove some lawn grass and almost all of the ti plants and tangerine that are located along the drainage ditch. New landscaping will be provided along Komohana and Punahale Streets and will include shrubs and trees to act as a visual screen for the building. This planned treatment would soften the appearance of the proposed building as well as screen views of any activities that may be seen through the housing unit windows and nearby activity yards. The new plants will be indigenous to the area and will meet State requirements that mandates planting of native species for certain State projects.

Fauna

The predominant wildlife species consist of low-land urban birds which typically frequent town and residential areas. These species include common myna, house sparrow, zebra dove, barred dove, rice finch, and Japanese white eye. Mongoose, stray cats, feral dogs, rats and mouse are mammals which may stray into the area. None of these avifaunal and feral mammal species are rare, endangered or threatened.

The construction of the new housing unit will not materially impact the habitat of these species. The habitat actually encompasses the entire Hilo area and the species are very mobile and readily able to move and adapt to other similar habitats around Hilo.

Air Quality

The air quality in the vicinity is very good. There are no major stationary sources of air pollutant in North Hilo. This urban fringe area is remote from industrial facilities, agricultural burning sites, landfills and incinerators.

The proposed project is not expected to generate air pollutants that would exceed State of Hawaii air quality standards. Emissions from vehicles which enter and leave the HCCC grounds will be at minor levels and will be well below any pollutant danger zone.

Noise

The ambient noise levels at the project site are dominated by the sounds generated from traffic on Waianuenue Avenue, Komohana Street and Punahale Street. Occasionally, there will be sounds from lawn mowers and repair work on existing structures in the area, and warning signals from reversing service trucks at HCCC. As described in the following Socio-Economic Section of this Environmental Assessment, loud and foul languages from inmates in the recreation yard and noise from off-duty guards are heard by neighbors.

The proposed project will generate short-term and long-term impacts. The short-term impacts will be associated with project construction. There will be a bulldozer, backhoe, grader, crane, dump truck, asphaltic concrete paving machine, roller and supply trucks to grade the site, prepare the foundation, construct the building, pave the pedestrian paths and parking area, and landscape the grounds.

Noise from these construction activities will be temporary. Once construction is completed in approximately 9 to 10 months, noise levels will return to existing levels.

In the long-term, the proposed project will maintain the existing noise levels in the vicinity. There will be no noticeable increase in the frequency or intensity of noise at the HCCC complex.

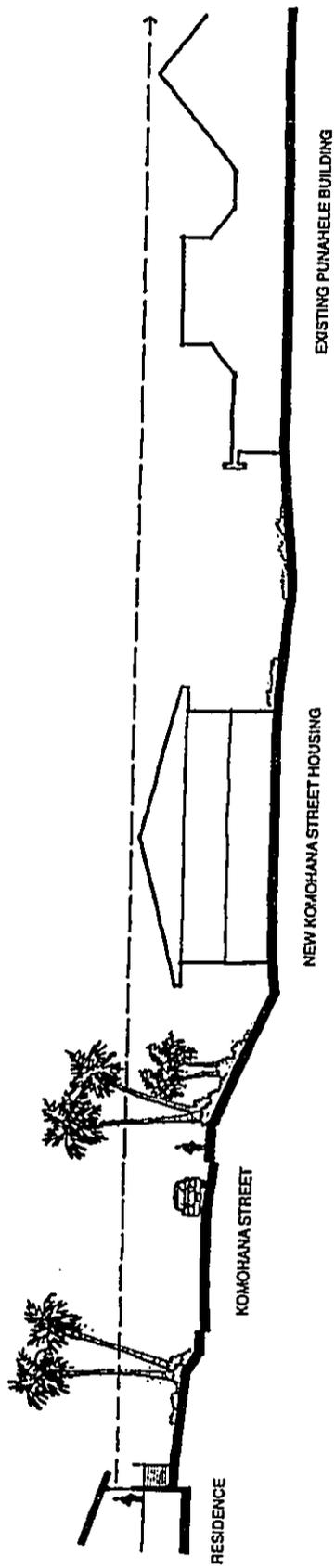
Visual

The visual quality of the area is characteristically residential. Buildings are one- or two-stories in height, with hip roof construction. There are yards and gardens around the buildings.

HCCC, which has existed on the site for over 40 years, has expanded a few times, but has maintained a residential appearance. Its buildings are low profile with one- and two-story construction, have residential style roofs and are surrounded by open space. Atypical of prisons, it does not have guard towers and barbed wire fences that surround the complex. There are no high-powered flood lights, large warning sirens and patrolling guards.

The new building will continue the residential theme on the HCCC property. Although the building will be two-stories in height, the site will be excavated so the building will sit lower on the property. From Komohana Street, the entire first floor of the building will be below the elevation of the County right-of-way, thus providing an appearance from Komohana Street of a one-story building. The homes directly across Komohana Street are at a higher elevation than the right-of-way and will have a slight to, perhaps, clear view over the roof of the new building. Figure 9 provides an illustration of the visual impact that might result on the residential dwellings above Komohana Street.

The homes across Punahale Street will have less visual impact because they will see only the narrow side of the building. The building also will be partially hidden by the project's lower site and landscaping. Homes to the north across Waianuenue Avenue will be even less impacted because of the distance and distraction of traffic on Waianuenue Avenue.



0 20 40
SCALE IN FEET

Figure 9
SITE SECTION AND VIEW IMPACT
New Housing Unit
Hawaii Community Correctional Center
Hilo, Hawaii
Belt Collins Hawaii, June 1996

Residences on the east side of HCCC are at a lower elevation than the project site and are separated by extensive landscaping. Views would not be visible of the new building.

As described in the following Socio-Economic Section of this Environmental Assessment, neighbors and some passersby have been subjected to occasional unwelcomed gestures by inmates as seen through the housing unit windows. Although these incidences are current occurrences and not part of the proposed project, they suggest that these behaviors may continue and increase with the new facility. Possible mitigation measures are discussed in the Socio-Economic Section.

Archaeological Sites

The project site has been substantially altered as a result of the HCCC complex and Komohana Street construction. Grading, drainage improvements and landscaping have changed the topography and appearance of the site.

In a report entitled Archaeological and Historical Studies for the Alenaio Stream Flood Damage Reduction Study prepared by Marion Kelly and J. Stephen Athens in 1982, reference is made of a ditch identified as the Hilo Boarding School and Old Mission Ditch. This ditch was constructed in the early to mid 1800s and was apparently used to provide water to Hilo village. A map (probably from the early 1900s) in the report, shows the ditch to have a mauka-makai alignment along the Halai Hills. Details of the map further reveal that the ditch was on the south side of what was eventually Punahele Street.

Another map, prepared in 1922 by E. W. Hackley, shows a drainage ditch running adjacent to the old Hilo Jail. This drainage is still evident on the property today. The other drainage which comes from Komohana Street between Punahele Street and Waiianuenue Avenue is not shown on Hackley's map. In comparing Hackley's map and the earlier map, the drainage adjacent to the old jail is not the Hilo Boarding School and Old Mission Ditch. This is later confirmed by a study prepared by Paul H. Rosendahl, Ph.D., Inc. (see below).

Also identified on the Hackley map is a Hawaii Mill Co. flume right-of-way which traversed the jail site. An old-time resident remembers the flume structure which stood high above the ground. This flume was probably used to transport by water cut sugar cane from the fields to the mill. This flume no longer exists.

The Kelly and Athens report does not have any recommendations on the drainage that runs through the project site and adjacent to the old Hilo Jail. The study briefly describes the presence of the old Hilo Jail in the area, but no specific description of the structure, itself, is provided. From State Historic Preservation

Division's (SHPD) files, the old Hilo Jail is shown to be nearly 100 years old and is considered valuable for its architecture and history, however it is not on the State register of historic places. It should be noted, the old Hilo Jail will not be demolished for the construction of the new housing unit.

In response to a letter by the State Department of Land and Natural Resources, dated May 8, 1996, a limited archaeological inventory survey of the project area was conducted. The study, which was performed by Paul H. Rosendahl, Ph.D., Inc. (see Appendix), revealed that there are only two archaeological features on the property and that they were both of historic period. The first feature, designated Site 20848, is an early historic period ditch. The second, designated Site 20849, is a more recent historic period ditch.

After documentary research and field investigation, both sites were assessed by Rosendahl as no longer significant. The sites have been measured, described, and photographed, and their locations have been plotted on an appropriate map. The consultant has determined that no further archaeological work is required. The findings of the study have been submitted to the State Historic Preservation Division for review and approval.

Attached in Chapter IX of this Environmental Assessment is a draft letter prepared by SHPD commenting on the Rosendahl report. In its review of the study, SHPD indicated that it does not agree that the sites are no longer significant. SHPD indicated that the age of the ditches is not clear and that further archival research might clarify that question. SHPD recommends that the report be revised to indicate the age of the ditches is still uncertain and to conclude that the sites are still significant under criterion D. SHPD also recommends that other textual changes be made to the report and to add photographs of the sites to the appendix. With the understanding that the report will be revised, SHPD can agree that the sites are significant for their information content and could conclude that the proposed project will have "no adverse effect" on the two sites, if certain mitigation work is done to gather additional information on the ditches' age (see June 25, draft letter). The HCCC has reviewed the draft letter and plans to provide the required information to SHPD.

Natural Hazards

HCCC is located more than 4,800 feet from the shoreline and is not susceptible to tsunami inundation. Surface runoff will occur during normal rainfall, but storm runoff may generate flood conditions. The proposed culvert system is designed to accommodate a 50-year storm but is capable of handling a 100-year storm.

Potential natural hazards such as volcanic eruptions and earthquakes are associated with the geological conditions of the area. The HCCC site is located on

the lower eastern flank of Mauna Loa, an active volcano that most recently erupted in 1984. Four historical flows from the volcano have approached Hilo, the most threatening being the 1881 flow, which followed a route just south of the existing Saddle Road and stopped near the mauka side of what is now the University of Hawaii-Hilo campus.

Mullineaux et al. (1987) have mapped the hazard zones for lava flows on the Island of Hawaii, showing zonal classifications ranging from Zone 1, consisting of the summit areas and active rift zones of Kilauea and Mauna Koa, to Zone 9, encompassing the Kohala Volcano where no eruption has occurred for about 60,000 years. The project site is located in Zone 4 which is in the more inactive areas. Notably, the hazard potential on Mauna Loa decreases progressively downslope from its summit.

In addition, volcanic hazards such as ground fractures, subsidence, and earthquakes can occur as a result of the movement of magma within volcanoes. There appears to be little risk of impact from ground fractures and subsidence. Mullineaux et al. (1987) have divided the island into four hazard zones; all of Hilo, for instance, is located in Zone 4, the area which is least susceptible to damage from this threat. To minimize the risk of damage due to earthquakes, the proposed project will be designed and constructed in accordance with the County of Hawaii Building Code, which bases its structural design standards on Seismic Zone 3 forces.

Brush fires are a potential, but not a likelihood since there are no forest land in the immediate vicinity. A small undeveloped area is located south of the property and may be a source of brush fire, but access and the availability of fire hydrants make this area potentially controllable. The remaining areas around the HCCC complex are already developed and in residential use.

Socio-Economic Considerations

Population:

The proposed beds in the new housing unit are expected to accommodate detainees who are already being housed in the existing Punahale Building. The new building is designed to relieve HCCC's current overcrowded condition.

HCCC staff is expected to increase by about 50 post positions as a result of the new facility. The actual number of personnel filling these posts may be about 70 because of the three working shifts in a typical 24-hour work day. The increase by shifts would be by about 9 or 10 positions for the first and third shifts and 30 for the second or day shift which would be comprised mostly of ACOs. The new employees are expected to come primarily from Hilo, but some ACOs are expected to transfer from the neighbor islands. The resultant impact on Hilo's population would be nominal and the effect on Hilo's housing demand would be minimal.

The additional personnel at HCCC will result in a slight increased burden on public infrastructure, such as roads and utilities. More HCCC commuters will be using the roadways, and water and sewer usage will increase to accommodate the new staff and increased maintenance and wash down operations around the building. The demand for other utilities, including telephone and electricity services, would also increase.

The proposed project will be developed in an open area where there are no existing homes. Therefore, no residences or other facilities will be displaced.

Economic Conditions:

Construction of the new housing facility will require short-term employment in the construction industry. It is estimated that construction will take approximately 9 to 10 months, and a construction crew of about 20 workers will be required for the job during the active construction period. Of these workers, it is estimated that 90 to 100 percent of the workers would be from the Big Island.

Operations at the new facility will be undertaken by additional HCCC personnel. This would result in an increase in secondary, i.e., indirect or induced, employment in the Hilo community. Indirect employment is the off-site employment generated as initial recipients of dollars re-spend the money in order to acquire goods and services needed to conduct their operations. Another indirect impact is the induced employment that is created when direct or indirect employees and proprietors spend their own wages and income within the community or island for their own personal needs. The dollars involved multiply themselves throughout the community, island and state, creating more jobs in the process. Thus, the increased economic activity generated by the project will generate employment not only at the site, but also elsewhere on the Big Island and throughout the state.

Payment for material and supplies for the new building and furnishings will add monies to the local economy. Of the \$ 2.8 million that will go for construction, approximately \$1.4 million will go to building suppliers and \$1.4 million will go to construction labor.

The new facility will add value to the property, but there will be no increased property tax revenues to the County since State facilities are exempted from such taxes. Property values of adjacent residential lands are not anticipated to fall despite beliefs to the contrary. There are cases across the country that demonstrate that property values are not negatively affected by their proximity to a correctional facility. Locally, this is evident by the continued development of residential homes immediately across the HCCC facility on Punahele Street.

Social Concerns:

Three public informational meetings were held by the Department of Public Safety prior to submittal of this environmental assessment to the Office of Environmental Quality Control. The meetings were attended by neighbors, elected officials, agency representatives and residents of the neighboring areas. Residents within 400 feet of the project site were mailed invitations to the first meeting, and public notices, advertized in the local newspapers, were made to the general public for the second and third meetings.

There were approximately 20 persons at the first meeting. The Department of Public Safety presented information on HCCC's plans for expansion and received comments and concerns from the attendees. The major comments and concerns were:

- 1) unwelcomed inmate behavior displayed to passersby through cell windows,
- 2) increased traffic on the adjoining roadways,
- 3) increased parking problems on the adjacent residential streets,
- 4) noisy warning signals from reversing delivery trucks servicing the community correctional center,
- 5) need for perimeter fencing around the complex,
- 6) visitors banging and communicating with inmates through the cell windows at night,
- 7) proximity of the community correctional center to schools,
- 8) potential decreases in property values resulting from location near the community correctional center,
- 9) inadequate warning system for neighborhood residents when an escape occurs, and
- 10) foul languages by inmates in exercise yards heard by neighbors.

The second meeting was attended by nearly 40 people; a number of persons attended for the second time. The Department of Public Safety reviewed the project, discussed the concerns that were raised at the pervious meeting and suggested possible mitigation measures (see Section VIII). The second half of the meeting was devoted to establishing a community resource group to be comprised of members of the community who would provide valuable input on community matters and concerns regarding the correctional center. At the conclusion of the meeting, a group was formed, comprised of all volunteers. The group is planning to meet regularly with HCCC to assist in mitigating community concerns regarding the correctional center.

The third meeting was attended by about 30 people and was held to clarify the Department's answers to some of the unresolved issues that were discussed in the previous meetings. The attendees were also able to meet and talk directly with the Director of the Department of Public Safety who was present for the meeting.

Circulation and Traffic

HCCC is bounded by Waianuenue Avenue, Komohana Street and Punahale Street. Waianuenue Avenue is a four-lane major thoroughfare within a 56-foot wide right-of-way that serves a number of business establishments, public facilities, recreational and cultural institutions as well as residential neighborhoods. It provides access between Hilo's central business district and mauka residential areas, and continues mauka as the saddle road between Mauna Kea and Mauna Loa to connect with West Hawaii.

Waianuenue Avenue is intersected by a number of cross streets including some with traffic lights. Ingress and egress from abutting properties are permitted. There are curbs, gutters and sidewalk on both sides of the street pavement. Posted speed limit is 30 miles per hour. There are no on-street parking on Waianuenue Avenue adjacent to the HCCC property. Several blocks makai of Komohana Street, however, parking is allowed on both sides of the right-of-way.

Komohana Street is a main connecting right-of-way between Waianuenue Avenue and Kawaihāni, a large residential district in South Hilo. It is a two-lane County road within a 75-foot wide right-of-way. It serves as a major access to a number of residential subdivisions in the area. At Waianuenue Avenue and Punahale Street, Komohana Street has turning lanes. Fronting the HCCC property, Komohana Street has a curb, gutters and sidewalk on both sides of the road pavement, but no on-street parking is allowed. Ingress and egress from adjoining properties are permitted, and the posted speed limit is 35 mph. A traffic light controls movement through the Waianuenue Avenue - Komohana Street intersection which is configured as a "T" intersection with Waianuenue Avenue as the through right-of-way.

Punahale Street is a local 40-foot wide right-of-way that provides mauka-makai access through upper Hilo town. It has an approximately 20 foot-wide pavement and no shoulders, curbs, gutters, or sidewalk. Posted speed limit is 25 mph. Punahale Street approaches the Komohana Street intersection at a "stop" sign.

Existing Traffic:

A 24-hour traffic count was taken on Komohana Street just north of the Ponahawai Street intersection on June 27-28, 1994 by the State Department of Transportation (DOT). Results of that survey showed there were 10,382 vehicles

Waianuenue Avenue (north) bound and 10,022 vehicles Puainako Street (south) bound. In a later survey (August 29-30, 1994) by R. M. Towill Corporation, Komohana Street just south of Punahale Street showed 10,523 vehicles Waianuenue Avenue bound and 17,254 vehicles Puainako Street bound. Both surveys were taken on a Monday and Tuesday of the week. The latter survey also had counts for Komohana Street between Punahale Street and Waianuenue Avenue. It showed 16,876 vehicles Waianuenue Avenue bound and 17,236 vehicles Puainako Street bound.

The R. M. Towill traffic count identified higher volumes on Komohana Street than the Department of Transportation survey. The difference could be in the time of the year the surveys were taken although both counts were taken during the summer when school was not in session. Another explanation may be that there are a number of medical buildings, offices and professional buildings located between Ponahawai and Punahale Streets and as a result, more traffic was moving to and from these facilities from the Waianuenue Avenue side. The location of traffic counters helped make this assessment. The R. M. Towill count was taken on Komohana Street just south of Punahale Street and the DOT count was taken just north of Ponahawai Street.

The 24-hour count by DOT on Punahale Street adjacent to the HCCC shows 8,673 vehicles in both eastbound and westbound traffic. No traffic counts were taken on Waianuenue Avenue adjacent to the HCCC site. However, further mauka near the Kaumana Drive intersection, a traffic count by DOT (June 15-16, 1994) showed Waianuenue Avenue to have a volume of 21,881 vehicles.

Peak hour traffic volumes, which are better indicators of traffic load, were evaluated on the three adjacent roadways. Komohana Street had a morning peak hour volume of 2,988 vehicles (two directions) between 7:15 a.m. and 8:15 a.m. and 2,965 vehicles (two directions) in the afternoon between 4:15 p.m. and 5:15 p.m. Punahale Street had a count of 877 vehicles during the same morning period and 700 vehicles during the afternoon period. Waianuenue Avenue experienced 1,721 vehicles during the morning peak period and 1,790 vehicles during the afternoon peak hour.

Projected Traffic:

The DOT surveys for Waianuenue Avenue and Komohana Street show traffic volumes over the last 8 to 10 years to the last survey date in 1994. The growth trend revealed from these surveys shows an overall increase in traffic of 4.2 to 4.6 percent per year. Thus, by 1997, traffic volume on Komohana Street is expected to increase to 3,419 vehicles during the morning peak hour (150 vehicles over last year), while Punahale Street traffic would increase to 1,003 vehicles or 44 vehicles over last year. Peak hour volumes on Waianuenue Street should increase to 1,969 vehicles during

this same time (87 vehicles over last year). The morning peak hour volume was assessed because it is generally higher than the afternoon peak hour volume. Evidently, this growth in traffic is the result of the continued regional development of Hilo and the construction of homes in the mauka lands along Komohana Street.

The project-generated traffic would come primarily from the new employees of the expanded facility. As described previously, the new facility is intended to reduce the overcrowded condition at the existing complex, so no new inmates are anticipated to occupy the proposed project. The new employees are expected to generate approximately 23 additional vehicles during the morning peak hour. These vehicles may not affect the regular peak hour traffic since the employees' shift begins at 7:00 a.m. prior to the regular peak hour traffic that occurs between 7:15 and 8:15 a.m. The first or night shift, which is expected to generate only 7 new vehicles, will leave about the time the regular morning peak hour traffic occurs. In the afternoon, when the second shift is over, the third or evening shift, which is expected to generate about 7 new vehicles, begins at 3:00 p.m., about an hour to an hour and a half before the actual afternoon peak hour occurs.

In summary, the morning peak hour will experience only a small increase in traffic volume on the adjacent roadways as a result of the expanded HCCC facility. This number would represent less than three percent of the traffic around the property. The afternoon peak hour, also, will experience very little additional traffic as a result of the new facility.

Parking:

There are 40 parking stalls, 3 for the handicapped, at HCCC. Eleven stalls are at the Punahale Street parking, 10 are at the Waianuenue Avenue parking and 19 are at the Komohana Street parking. Visitors and employees alike, are allowed to park at any of the three facilities.

Parking at the Punahale Street facility is frequently busy because it serves the Punahale Building where administrative functions and intake services occur. One of the complaints of neighbors is that parking often overflows onto Punahale Street and in front of their properties.

Proposed Mitigation:

Nineteen additional parking stalls will be provided with the new housing facility. It will be primarily adjacent to the Punahale Street facility and will be available for employees as well as visitors. The total number of stalls for the new and existing facilities will meet County parking requirements.

Water

The proposed project will be served by an existing 8-inch water line on Punahale Street. Although the facility will use additional water, the net demand will not be significant. Water use will increase as a result of additional staff and increase in janitorial and building maintenance work. Less water, however, will be needed for landscaping since the new building will cover what was once a grass lawn area in the existing complex.

Use of water by inmates will not increase significantly since the occupants of the new facility will be transferees from within the existing complex. A preliminary estimate of projected water demand from the new facility is expected to be approximately 11,500 gallons per day.

Sewer

HCCC is presently served by an on-site sewer line that follows the existing drainage ditch within the property. This line then connects with a sewer main along Waianuenue Avenue which eventually discharges into Hilo's wastewater treatment plant near Hilo airport.

The proposed project will connect with the on-site sewer line and is expected to generate approximately 11,500 gpd of sewage from the operations and maintenance of the new facility.

Telephone and Electricity

These services are provided by the GTE Hawaiian Tel and the Hawaii Electric Light Company. Overhead telephone and electrical lines are located along Punahale Street and are available for the new housing facility.

VI. SUMMARY OF MAJOR IMPACTS

The proposed project will generate both short-term and long-term impacts. The short-term impacts are associated with the construction of the new facility which is expected to take approximately 9 to 10 months. The most noticeable impacts would occur during the site preparation stage. There would be dust and noise from earthwork activities and a slight increase in traffic generated by construction vehicles bringing material and supplies to the site. These anticipated impacts would be temporary in nature and are expected to cease once construction is completed.

Anticipated long-term impacts would occur during the operational stage of the new facility. Additional vehicular traffic would be generated by increases in the HCCC staff. There will be a need for additional on-site parking and increased water, sewer, telephone and electrical services.

Obscene and unwelcomed behavior displayed by inmates at passersby and neighboring residents may increase and cause further public dismay and consternation. These impacts are not expected to be significant in the new building which is being designed to reduce exposure to the outside.

Construction and operation of the new facility will generate positive effects on the local economy. Employment in the construction industry will be stimulated and new long-term jobs will be created for the operational stage of the project.

VII. ALTERNATIVES CONSIDERED

In 1994, Hale Nani, a community base program facility located 4 miles outside of Hilo, was considered for the new detainee housing facility. It was in a distant area surrounded by forest and agricultural lands and contained sufficient land area for the new facility. During the project's public interaction phase, there were considerable concerns on the proposed intensive use of the site and its compatibility with the surrounding land uses. It was also noted that the more intensive use may not have been consistent with what was presented earlier to the community when Hale Nani was granted Special Permit No. 736.

During this period, the Corrections Division was also considering a plan to develop a 1,000-bed high security facility near the Kulani Correctional Facility, 22 miles south of Hilo on the slopes of Mauna Loa. Although the detention housing unit was clearly a separate project from the 1,000-bed high security facility, it was coincidentally mixed in the publicity surrounding the new Kulani facility. The magnitude of the projects was amplified and, to an extent, overwhelmed the community.

The Corrections Division sensed the concern and decided to withdraw its proposal for Hale Nani as a site of the new detention facility. In 1994 when Governor Cayetano took office, the 1,000-bed complex at Kulani was canceled. There were negative public reactions to transporting of inmates to the neighbor islands and the hard fact that a shortage of State funds existed.

It has been two years since the high security facility was canceled, but the County of Hawaii is still in serious need for a detention housing facility. With a tighter budget, the Corrections Division is now seeking a site that can be easily developed and is presently served by adequate infrastructure. A location nearer the

courts would be a major advantage, since current detainees in Hilo are transported back and forth between the facilities and courtroom.

After evaluating alternatives, the Corrections Division selected the HCCC site. It met the above criteria and could be readily built.

Alternative locations within the HCCC grounds were also explored for the housing unit. The Waianuenue Avenue-Komohana Street corner of the property was an early consideration. The site was adjacent to the existing Waianuenue Building, had excellent access from Waianuenue Avenue and could easily connect with utility lines along Waianuenue Avenue. The proposed site, however, would have required immediate demolition of the old Hilo Jail resulting in additional construction cost for the project. The old Hilo Jail also may have some sentimental value and may have required documentation for historic records purposes before removal.

The present site is currently vacant and accessible from the Punahale Building which has HCCC's intake processing area. It has enough space for landscaping, additional parking and security fencing, if required. Two existing drainage channels exist on the site and will require placement in underground culverts.

The project's selected size was determined based on HCCC's immediate need and ultimately on the availability of State funding. Funding for the project is being obtained from the State's CIP fund. There are no funds at this time for future expansion.

VIII. PROPOSED MITIGATION MEASURES

Mitigation measures will be implemented, if necessary, to reduce or lessen any intense impacts. For example, noise generated by construction equipment would be mitigated by limiting the use of heavy machinery to normal daylight working hours and employing muffler devices or noise suppressants on gasoline and diesel-powered equipment.

Construction-generated dust could be controlled by water sprinkling, dust screens or other measures prescribed by the Chief Engineers of the County of Hawaii. Equipment used for on-site construction will emit some air pollutants via engine exhaust. Such equipment will be properly maintained by the contractor to maximize the efficiency of fuel combustion and minimize excessive emissions from heavy equipment exhaust pipes.

During construction, there will be some construction vehicles on the area roadways transporting material and equipment to and from the site. The number of

vehicles involved in this operation would be small and should have little effect on traffic except when the heavier, slow-moving vehicles travel up Waiianuenue Avenue. These vehicles, notably, will be travelling at various hours of the day and would not be concentrated during the regular peak periods.

The two-story housing facility will have a height of approximately 29 feet 8 inches. The foundation of the new building, however, will be excavated into the site and the finish floor elevation will be set low. Figure 9 illustrates the visual effect of the new building from Komohana Street. Pedestrians and motorists travelling on this right-of-way will have, in effect, a view of a single-story building. Landscaping will be provided along the street frontage to soften the appearance of the building, as well as, to screen any visibility of the building's windows where possible contact with inmates may occur.

As described in the previous section, a number of operational concerns were raised during the agency's informational meetings. They included obscene and unwelcomed behavior displayed by inmates at passersby and neighboring residents. Whether the inmates are in their cells and visible through their windows or out in the recreational yards, the residents would like to see this behavior changed. Although it is a behavioral problem under HCCC's current supervision, residents see this as a continuing matter with the new facility. HCCC's management has considered possible measures for controlling this behavior but total control would probably be impossible.

It has been suggested that a perimeter fence be erected to prevent unauthorized visitors from communicating with inmates through their windows. This is a solution that is favored by HCCC but was not implemented earlier because management's understanding was that fencing on the perimeter was not previously acceptable to the community. If the general consensus is for such a fencing, appropriations would be sought from the State Legislature.

To reduce the visibility of inmates through the building's windows, HCCC is considering several options including the use of window fixtures and treatment. Passersby would consequently have very little view, including at night, of the internal activities of the building.

Use of foul language and loud noise while inmates are in the recreational yards, may be controlled by the use of penalties or awards.

Noise that is emitted during the early morning hours by delivery trucks servicing the HCCC may be mitigated by a change in operations. Delivery could be arranged during the regular daylight hours or an exception could be sought from the Occupational Safety & Health Administration to allow the use of muted reverse warning signals for delivery trucks or to allow trucks to turn off their warning

signals when delivery is made during the night hours when it is less likely that pedestrians will be encountered in the area.

Since HCCC does not have a siren warning system to alert neighbors of an escape, residents have no means of knowing when they should be on guard. The standard solution would be to install a siren warning system, but an alternative would be to develop a network or "telephone tree" among residents in the neighborhood. This arrangement could disseminate more information on the escape to the public than the standard siren warning system.

Nineteen additional parking stalls will be provided primarily at the Punahele Building to relieve the parking pressures on the adjacent street. These stalls will be available to visitors as well as to the HCCC employees.

A community resource group was established to improve communications between the community and HCCC on an equal partnership basis. This group will assist in mitigating community concerns regarding the correctional center as well as assisting HCCC with valuable community resources and input.

IX. DETERMINATION

This assessment presently demonstrates that the proposed action will have no significant impact on the environment and that an Environmental Impact Statement is not warranted. Therefore, a Negative Declaration for this project is in order.

X. FINDINGS AND REASONS SUPPORTING THE DETERMINATION

The following findings and reasons indicate the proposed action will have no significant adverse effect on the environment, and consequently, support the above determination.

1. Economic impacts are expected to be beneficial as a result of construction work on the project and continued long-term employment at the facilities.
2. The impacts associated with construction activities are short-term and temporary. All short-term impacts will be minimized in accordance with applicable County of Hawaii, State of Hawaii and Federal laws, statutes, and rules and regulations.
3. No rare or endangered wildlife or flora species are anticipated to be affected.

4. An archaeological study has been conducted on the project site and an archaeological clearance will be obtained from the State Historic Preservation Division before any construction occurs on the property.
5. The proposed action will not result in any significant adverse visual impact.
6. The proposed action is consistent with the Hawaii County General Plan, County Zoning Ordinance, Hawaii Coastal Zone Management Program, and Special Management Area Policies and Objectives.
7. The proposed action will improve the near-term need for more bed space in our prison system and keep inmates who are a threat to society incarcerated to their assigned length of term.
8. The proposed action will not displace any existing homes or facilities or require the need to provide housing for employees.
9. The establishment of a community resource group will address community concerns on problems currently being encountered with HCCC.
10. With the implementation of mitigation measures, there would be no significant adverse social impact resulting from the proposed action.

XI. COMMENTS AND RESPONSES FROM AGENCIES, ORGANIZATIONS AND INDIVIDUALS

A Draft Environmental Assessment for this project was transmitted to the following agencies, organizations and individuals for review and comment. The parties that responded are indicated below and a copy of their correspondence with a response from the proposing agency is attached to this section. Comments from these agencies, organizations and individuals have been incorporated into this Final Environmental Assessment, where necessary.

<u>State Agencies</u>	<u>Agencies Responded</u>	<u>Agencies Responding w/ No Comment</u>	<u>Agency Letters and Responses Attached in this Section</u>
Department of Accounting and General Services			
Deputy Public Defender, Office of the Public Defender - Hilo Office			

<u>State Agencies (continued)</u>	<u>Agencies Responded</u>	<u>Agencies Responding w/ No Comment</u>	<u>Agency Letters and Responses Attached in this Section</u>
Judge Greg Nakamura, First Division Third Circuit - Hawaii County			
Judge Jeffrey Choi, First District (Hilo) Third Circuit - Hawaii County			
Judge Ben H. Gaddis, District Family Court Judge, Third Circuit			
Hilo High School			
Hilo Intermediate School			
Department of Land and Natural Resources			
State Historic Preservation Division	X		X
Department of Human Services		X	X
Department of Health, Environmental Management Division		X	X
Department of Transportation, Highway Division			
Office of Hawaiian Affairs			
Office of State Planning	X		X
<u>County of Hawaii Agencies</u>			
Office of the Mayor			
Planning Department	X		X
Department of Public Works	X		X
Department of Water Supply	X		X

<u>County of Hawaii Agencies (cont'd)</u>	<u>Agencies Responded</u>	<u>Agencies Responding w/ No Comment</u>	<u>Agency Letters and Responses Attached in this Section</u>
Fire Department	X		X
Police Department	X		X
Prosecuting Attorney			
<u>Utility Companies</u>			
Hawaii Electric Light Co., Inc.			
GTE Hawaiian Tel			
BHP Hawaii, Inc. (Gasco, Inc.)			
<u>Organizations and Individuals</u>			
Kaumana 1 Mile Kumiai	X		X
Historic Hawaii Foundation			
Chamber of Commerce			
Japanese Chamber of Commerce and Industry of Hawaii			
Rudolph P. Spencer (responded independently)	X		X



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
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DEPUTY
DELEGETE COLUMA-AJAJAWA

AGRICULTURAL DEVELOPMENT PROGRAM
AQUATIC RESOURCES CONSERVATION AND RESTORATION
CONSERVATION AND RESTORATION AFFAIRS
RECREATION AND TOURISM
RESOURCES DEVELOPMENT
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

May 8, 1996

Mr. Glen T. Koyama
Belt Collins Hawaii
680 Ala Moana Boulevard
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

**SUBJECT: Draft Environmental Assessment for Proposed Housing Facility,
Hawaii Community Correction Center
Hilo, South Hilo, Hawaii Island
TMK: 2-3-23:5**

LOG NO: 17094 ✓
DOC NO: 9605PM02

G. Koyama
Page 2

Separate site numbers since they appear to be of different ages. A report on this work should be submitted to our office for review and comment. Once we have determined that a sufficient amount of information has been obtained to interpret the age and function of these two sites, we could then conclude that the proposed housing project would have a "no adverse effect" on these sites. We assume that a portion of the longer ditch will remain intact on the grounds of the Hawaii Community Correctional Center.

If you have any questions please contact Patrick McCoy (587-0006).

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

PM:amk

Thank you for your letter of April 19, 1996 and the opportunity to comment on the Draft Environmental Assessment for the proposed housing at the Hawaii Community Correction Center.

We do not agree with the conclusion that the proposed project will have "no effect" on historic sites. Marc Smith, our staff archaeologist in Hilo, inspected the property from outside the fence on May 2, 1996 and confirmed the existence of two historic ditches. The first ditch and only one clearly illustrated in Figure 5, is a generally steep-sided depression with little or no rock work that runs diagonally across the parcel from the corner of Punahale and Komohana streets toward the Wai'anue Avenue side. The second ditch, a short segment of which appears to be represented as a parallel rock wall near the new fenced walkway on Figure 5, is well constructed with stones lining the sides and bottom. This ditch intersects the first. Though we are uncertain of the absolute ages of these ditches, they are clearly older than 50 years, thus qualifying as historic sites.

Based on the information presented in the EA the proposed housing facility will have an adverse effect on both ditches. We believe that the adverse effect could be mitigated by doing some historical research and fieldwork to map, describe and perhaps conduct excavations across dry sections of the two ditches, which we think should be given

DRAFT

LOG NO: 17436
DOC NO: 9606FMS2

Mr. Glen Koyama
Belt Collins Hawaii
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

SUBJECT: Draft Report: "Limited Archaeological Inventory Survey Proposed
Housing Facility Hawaii Community Correctional Center" (Walker,
Maly and Rosendahl 1996)
Pt'lhouna, South Hilo, Hawaii Island
TMK: 2-3-23: For. 5

This is in response to your request for an expeditious review of the subject report, received in our office on June 18, 1996. Patrick McCoy and Holly McEldowney have both reviewed the report and have the following comments to offer.

We believe that the inventory survey of the subject parcel was adequate in identifying the presence of two historic ditches. The background work indicates that the two ditches were likely used for agricultural and household use, but their age is still uncertain in our view. The large ditch (20848) could have been constructed in prehistoric times or in historic times. Also, portions could date to both time periods, and natural features could also have been used along part of its extent. The age of the smaller ditch (20849) also is not completely clear. We agree with the report (pages 6 and 12) that further archival research might clarify this situation. We, thus, agree with the report's initial significance evaluation (important for their information content, criterion D), and disagree that they are "no longer significant".

It is our recommendation that the report be revised to indicate that the age of the ditches is still uncertain and to conclude that the sites are still significant under criterion D. See suggested revisions in Attachment 1. We also recommend a few photographs of the ditches be appended at the end of the report.

With the understanding that the report would be so revised, we can agree that the sites are significant for their information content. We could further conclude that the undertaking will have "no adverse effect" on the sites, if the following mitigation work is done to gather additional information on the sites' ages.

(1) Additional archival research be done in Honolulu. This would include checking the State Survey Office, the Bureau of Conveyances, Records in the Division of Land Management (DLNR) and the Hawaii State Archives documents on water cases.

DRAFT

Someone from Belt Collins may be able to check these repositories with guidance from the consultants.

(2) An archaeologist shall monitor initial ground altering activity near the ditches at both sites to obtain further information about the construction and context of both ditches. Please contact our office prior to monitoring to finalize a scope for what kinds of information should be looked for and documented.

(3) An archaeologist shall fieldcheck styles of facings of known age along other portions of the drainage ditches (e.g., in the Hilo Intermediate School area) to attempt to identify chronological age of the ditches in the project area. (This is a task of but a few hours fieldtime.)

None of these tasks will involve lengthy work. The findings should be written up in a report, to be submitted to our office for review and approval.

With reference to our letter of May 8, 1996, we are still operating on the assumption that a portion of the longer ditch will remain intact on the grounds of the Hawaii Community Correctional Center. If this is not the case please let us know.

If you have any questions please contact Patrick McCoy (587-0006).

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

PM:

c. Paul Rosendahl, PHRI

DRAFT

Attachment 1

Revisions Needed for Draft Report

"*Limited Archaeological Inventory Survey Proposed Housing Facility Hawaii
Community Correctional Center*"

(Walker, Maly and Rosendahl 1996)

p. 5, para. 6. Minor point. In discussing the soil types present in the project area, the statement is made that these soil types were used for cultivating sugar cane, growing truck crops, for orchards and for pasture. It would help to add that these soils were also capable of supporting Hawaiian crops.

p. 7 and 8, Figs 4 and 5. It would help the reader to have the dates of these maps included in the figure captions.

p. 9, para. 4. Important point, relative to age. The source of Kaleiobolani's testimony is given by Kelly (see Addendum, page 31). It was from Water Rights Case #2248, dated January 13, 1915 and located in the Hawaii State Archives. This source should be inserted. Kaleiobolani notes that the first of the ditches were built under the chief T. Assuming that the individual named T in the testimony may be the famous Hilo chief, the relative time period in which the ditch could have been built can be estimated, and should be here. This can be expressed by the number of generations T ruled before Kamehameha and a chronological estimate based on a stated ratio of years per generation (i.e., 20 or 25 years per generation). This would be in the mid-1600s (20 years per generation). We feel that the testimony given by Kaleiobolani merits more consideration in the discussions. His testimony clearly suggests that he disagrees and contests the claims that the Boarding School had perpetual rights to the ditch. He suggests the possibility the ditch in this area is older. This should be noted.

p. 13, para. 4; p. 14, para. 3; p. 18, para. 1. While the conclusions drawn may be valid, make sure that they are consistent. The text seems to assign a date of early historic vs 1890s in several cases, and no date is presented on page 13. Also, we believe that it needs to be added that the "Hilo Boarding Ditch" may be much older (the T reference), which might make the ditches in the project older. Also, we believe that your analysis clearly shows potentially contradictory information found in the references cited. The testimonies cited are sufficient to justify some generalized depiction of ditches in this part of Hilo. It should be summarized that multiple ditches are described and they were altered or bifurcated through time. It should be noted that the initial age of ditch construction in the area is uncertain. The discrepancy between the Boarding School Ditch shown on the Pihoonua House Lots map as running under Waiamueue Street and that shown on the Hilo Sugar Company map should be discussed a bit.

DRAFT

These discrepancies should be evaluated during the mitigation's additional archival research. For example, is the ditch shown on the Pihoonua House Lot map the same as the Pihoonua ditch Coan and Wetmore later tapped "at Union School"? Is it possible that any of these ditches are the T ditch which apparently ran to the bottom of Waiamueue Avenue? Does the ditch crossing under Komohana Street (# 20849) continue north of Komohana Street through the subdivision? If so, does this drainage correspond with the boundaries of the House Lots or any other configuration that might provide a clue to its age? Was there a spring associated with the street named Puna'wai in the Pihoonua House Lots and could drainage from this spring help explain some of the ditch patterns in this area?

p. 14, para. 2 and 4. In these two paragraphs, it is not clear which "Hilo Boarding School Ditch" Athens refers in his 1982 study. Is it the one shown on the Pihoonua Homestead Lots map or on the Hilo Sugar Company map?

SIGNIFICANCE EVALUATIONS

Given the uncertainty over site age, we would recommend that the sites still be considered significant under their information content. Thus, p. 19 (para 2 and 3) needs modification and Table 2 on page 20.

GENERAL MITIGATION RECOMMENDATIONS

We recommend further archival work, archaeological monitoring of construction, and fieldcheck of architectural styles of facing -- all tasks requiring minimal effort. Thus, Table 2 on page 20 needs modification to show Further Data Collection. And text in the last paragraph on page 19 would need modification.



BELT COLLINS
H A W A I I

June 25, 1996
633-0500 /96A-304

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Dear Mr. Hibbard:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

Thank you for your letter of May 8, 1996 regarding the Hawaii Community Correctional Center and your draft letter of June 25, 1996 responding to our submittal of Paul Rosendahl's "Limited Archaeological Inventory Survey" report. The Department of Public Safety will have its consultant make the necessary revisions to the report and will provide the additional information requested by your office.

We thank you for your comments and assistance on this project.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

GTK:gk

cc: Ted Sakai
Beryl Iramina

BENJAMIN J. CAVETANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF HUMAN SERVICES
1390 Miller Street
Honolulu, Hawaii 96813

April 28, 1996

Mr. Glen T. Koyama
Belt Collins Hawaii
680 Ala Moana Blvd., 1st Fl.
Honolulu, HI 96813-5406

Dear Mr. Koyama:

Subject: EA, Proposed Housing Facility, Hawaii Community Correction
Center, Hilo, Hawaii

Thank you for the opportunity to review this document. We do not have any
comments to offer at this time.

Sincerely,

Kathleen O. Stanley

for
Susan B. Chandler, M.S.W., Ph. D.
Director

SUSAN B. CHANDLER, M.S.W., Ph.D.
DIRECTOR
KATHLEEN O. STANLEY
DEPUTY DIRECTOR

1996 APR 29 P 4:13

BELT COLLINS HAWAII



BELT COLLINS
H A W A I I

June 21, 1996
633-0500/96A-302

Susan B. Chandler, M.S.W., Ph.D.
Director
Department of Human Services
State of Hawaii
1390 Miller Street
Honolulu, Hawaii 96813

Dear Dr. Chandler:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

Thank you for your letter of April 26, 1996 regarding the Hawaii Community
Correctional Center. Although you had no comments on the project's Draft
Environmental Assessment, we appreciate your review of the document.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

GTK:gk

cc: Ted Sakai
Beryl Iramina

680 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5406 U.S.A. TEL: 808 531-5161 FAX: 808 538-7819
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BERNARD J. CATELINO
DIRECTOR OF HEALTH



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801

LAWRENCE BIRCH
DIRECTOR OF HEALTH

680-680-6800

in reply, please refer to

June 4, 1996

96-069/epo

Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Boulevard
First Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

Subject: Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii
THK: 2-3-23: 5

Thank you for allowing us to review and comment on the subject document. We do not have any comments to offer at this time.

Sincerely,

Bruce S. Anderson
BRUCE S. ANDERSON, Ph.D.
Deputy Director for Environmental Health



BELT COLLINS
H A W A I I

June 21, 1996
633-0500/96A-301

Bruce S. Anderson, Ph.D.
Deputy Director for Environmental Health
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Anderson:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

Thank you for your letter of June 4, 1996 regarding the Hawaii Community Correctional Center. Although you had no comments on the project's Draft Environmental Assessment, we appreciate your review of the document.

Sincerely yours,
BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

GTK:gk

cc: Ted Sakai
Beryl Iramina

Stephen K. Yamashiro
Mayor



County of Hawaii
PLANNING DEPARTMENT

23 Auwahi Street, Room 109 • Hilo, Hawaii 96720-4233
(808) 961-8233 • Fax: (808) 961-9415

Virginia Goldstein
Director

Norman Olsson
Deputy Director

MAY 20 A 9 45

Mr. Glen T. Koyama
Belt Collins Hawaii
Page 2
May 15, 1996

May 15, 1996

Mr. Glen T. Koyama
Belt Collins Hawaii
680 Ala Moana Boulevard, First Floor
Honolulu, HI 96813-5406

Dear Mr. Koyama:

Environmental Assessment
Hawaii Community Correctional Center
Tax Map Key: 2-3-2315

We have received your letter of April 19, 1996 which transmitted a copy of the Draft EA for this project. We have the following comments to offer:

1. The technical description of the project should accurately represent the current plan(s). The current parking plans as well as the proposed plans do not identify the stalls which are designated to comply with the requirements of the Americans with Disabilities Act (ADA). These stalls need to be of appropriate size, marking and signed.
2. In our preliminary review of plans submitted to us under separate cover, we informed other consultants of the Department of Public Safety that the project as planned will not meet the County's minimum requirements for parking. The plans showed 53 parking stalls while the Zoning Code will require 59 stalls.
3. There appears to be a shortage of stalls at this complex as vehicles were parked in areas not designated for parking such as landscaping areas, aisle space, and on the shoulder of Punahale Street. Adequate parking must be provided as the frontage along Komohana Street and Waiānuenu Avenue are no parking areas and must be kept free of curbside parking to permit smooth traffic flow.

Should you have any questions, please contact Rodney Nakano of my staff at 961-8288.

Sincerely,

VIRGINIA GOLDSTEIN
Planning Director

RKH:mjs
F:\WP60\RODNEY\96-2\KROYAMA1.RKH



BELT COLLINS
H A W A I I

June 21, 1996
633-0500/96A-296

Ms. Virginia Goldstein, Director
Planning Department
County of Hawaii
25 Aupuni Street, Room 109
Hilo, Hawaii 96720-4252

Dear Ms. Goldstein:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

Thank you for your letter of May 15, 1996 regarding the Hawaii Community Correctional Center (HCCC). We will submit for your review, under separate cover, a current parking plan for the project. It will show the designated stalls which comply with Americans with Disabilities Act (ADA) requirements. The updated parking plan will also show a total of 59 existing and new parking stalls to comply with the County's Zoning Code. ✓

Finally, the additional parking, which will be constructed with the new pre-trial housing facility, will help alleviate the parking problem on Punahale Street and in the existing parking lot fronting the Punahale Building. If parking on the Punahale Street shoulders is still a problem, HCCC will seek advice from the community resource group which has been established to work with the correctional center to address various community concerns.

HCCC does not know of any curbside parking problem that currently occurs on Komohana Street and Waiuanue Avenue adjacent to the proposed project.

We trust the above addresses your concerns regarding the project. Please do not hesitate to contact me, if there are any other matters which should be addressed.

Sincerely yours,

BELT COLLINS HAWAII LTD

Glen T. Koyama

Glen T. Koyama

GTK:ggk

cc: Ted Sakai
Beryl Iramina

600 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5108 U.S.A. TEL: 808 511-5161 FAX: 808 518-1819
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Stephen K. Yamashiro
Mayor



Donna Fay K. Kiyosaki
Civil Engineer

Jiro A. Sumada
Deputy Civil Engineer

MAY 23 P 2:13

County of Hawaii

DEPARTMENT OF PUBLIC WORKS
23 Airport Street, Room 202 • Hilo, Hawaii 96720-4252
(808) 941-6331 • Fax (808) 949-7138

May 21, 1998

MR GLEN T KOYAMA
BELT COLLINS HAWAII
680 ALA MOANA BOULEVARD FIRST FLOOR
HONOLULU HAWAII 96813-5406

SUBJECT : DRAFT ENVIRONMENTAL ASSESSMENT
Hawaii Community Correctional Center
Pihonua, South Hilo, Hawaii
TMK: 2-3-23:5

We acknowledge receipt of your letter concerning the subject matter, and provide you with our comments as follows:

1. Any building construction shall conform to all requirements of code and statutes of the County of Hawaii.
2. The subject area is known to have a drainage problem caused by storm and spring generated runoff. The applicant shall provide adequate measures to mitigate this recurring problem.
3. All development generated runoff shall be disposed on site and shall not be directed toward any adjacent properties.
The applicant shall be informed that if drywells are included in the subject improvements, an Underground Injection Control (UIC) permit must be applied for from the Department of Health, State of Hawaii.
4. All earthwork and grading shall be in conformance with Chapter 10, Erosion and Sediment Control, of the Hawaii County Code.
5. Any work within the County right-of-way shall be in conformance with Chapter 22, Streets and Sidewalks, of the Hawaii County Code.

DRAFT EA
May 21, 1998
Page 2 of 2

6. Sewer line connections shall conform to the rules and regulations of the County of Hawaii, Wastewater Division.

Should there be any questions concerning this matter, please feel free to contact Mr. Casey Yanagihara in our Engineering Division at (808)961-8327.

Gale M. Kuba, Division Chief
Engineering Division

CKY/CR

CC : Planning Department

HCCC EA



BELT COLLINS

June 21, 1996
633-0500/96A-297

Mr. Galen M. Kuba, Division Chief
Engineering Division
Department of Public Works
County of Hawaii
25 Aupuni Street, Room 202
Hilo, Hawaii 96720-4252

Dear Mr. Kuba:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

Thank you for your letter of May 21, 1995 and your comments regarding the Hawaii Community Correctional Center (HCCC) project. We provide you with our response in the order of your comments:

- 1) The HCCC will comply with all codes and statutes of the County of Hawaii.
- 2) Imata and Associates of Honolulu has conducted a drainage study of the two drainageways in the project area and designed an appropriate drainage system for the site. The study and drainage system design will be submitted to your department for review and approval.
- 3) The proposed drainage system design will meet County Public Works Department and State Department of Health drainage improvement requirements. Plans will be submitted to your office for review and approval.
- 4) A grading plan is being prepared as part of the project's construction plans and will be submitted for review and approval.
- 5) HCCC does not plan to do any work in the Punahele Street and Komohana Street rights-of-way and, therefore, would not be subject to Chapter 22, Streets and Sidewalks of the Hawaii County Code.
- 6) The new facility will connect with the County sewer system and will conform to the rules and regulations of the Wastewater Division, County of Hawaii.

We trust our response adequately addresses your comments regarding the project. Should you have any further questions or concerns on the proposed action, please do not hesitate to contact me at (808) 521-5361.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

cc: Ted Sakai
Beryl Iramina

680 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5106 U.S.A., TEL: 808 521-5361 FAX: 808 528-7819
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DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII
 25 AUPUNI STREET • HILO, HAWAII 96720 • P 1-54
 TELEPHONE (808) 969-1421 • FAX (808) 969-1366

May 6, 1996

Mr. Glen T. Koyama
 Belt Collins Hawaii
 680 Ala Moana Boulevard, First Floor
 Honolulu, HI 96813-5406

ENVIRONMENTAL ASSESSMENT
 HAWAII COMMUNITY CORRECTIONAL CENTER
 HILO, HAWAII
 TAX MAP KEY 2-3-23:5

We have reviewed the subject Environmental Assessment.

Please be informed that the property is serviced by two 2-inch and one 1½-inch meters.

We request that you submit information as to which meter will be utilized to service the new facility for our review and approval.

Should there be any questions, please contact our Water Resources and Planning Section at 969-1421.

MOR

Milton D. Pavao, P.E.
 Manager

HA



BELT COLLINS
 H A W A I I

June 21, 1996
 633-0500/96A-300

Mr. Milton D. Pavao, P.E., Manager
 Department of Water Supply
 County of Hawaii
 25 Aupuni Street
 Hilo, Hawaii 96720

Dear Mr. Pavao:

Environmental Assessment
 Hawaii Community Correctional Center
 Hilo, Hawaii

Thank you for your letter of May 6, 1996 regarding the Hawaii Community Correctional Center. Upon completion of the final design for the new building, the project architect will submit plans to your department for review and approval. The plans will indicate the meter to which the new building will connect.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
 Glen T. Koyama

GTK:gg

cc: Ted Sakai
 Beryl Iramina

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Stephen K. Yamashiro
Mayor



County of Hawaii

FIRE DEPARTMENT
445 Keeaule Street • Hilo, Hawaii 96720-3983
(808) 961-8397 • Fax (808) 961-8370

Nelson M. Teuji
Fire Chief

Edward Bumauy
Deputy Fire Chief

Mr. Glen T. Koyama
Page 2
April 25, 1996

April 25, 1996

Mr. Glen T. Koyama
Belt Collins Hawaii, Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, HI 96813-5406

Dear Mr. Koyama:

Subject: Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

The Fire Department's requirements as stated in the Fire Code are:

"Fire Apparatus Access Roads

"Sec. 10.207. (a) General. Fire apparatus access roads shall be provided and maintained in accordance with the provisions of this section.

"(b) Where Required. Fire apparatus access roads shall be required for every building hereafter constructed when any portion of an exterior wall of the first story is located more than 150 feet from fire department vehicle access as measured by an unobstructed route around the exterior of the building.

"EXCEPTIONS: 1. When buildings are completely protected with an approved automatic fire sprinkler system, the provisions of this section may be modified.

"2. When access roadways cannot be installed due to topography, waterways, nonnegotiable grades or other similar conditions, the chief may require additional fire protection as specified in Section 10.301 (b).



"3. When there are not more than two Group R, Division 3 or Group M Occupancies, the requirements of this section may be modified, provided, in the opinion of the chief, fire-fighting or rescue operations would not be impaired.

"More than one fire apparatus road may be required when it is determined by the chief that access by a single road may be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

"For high-piled combustible storage, see Section 81.109.

"(c) Width. The unobstructed width of a fire apparatus access road shall meet the requirements of the appropriate county jurisdiction.

"(d) Vertical Clearance. Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches.

"EXCEPTION: Upon approval vertical clearance may be reduced, provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance.

"(e) Permissible Modifications. Vertical clearances or widths required by this section may be increased when, in the opinion of the chief, vertical clearances or widths are not adequate to provide fire apparatus access.

"(f) Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with a surface so as to provide all-weather driving capabilities." (20 tons)

"(g) Turning Radius. The turning radius of a fire apparatus access road shall be as approved by the chief." (45 feet)

"(h) Turnarounds. All dead-end fire apparatus access roads in excess of 150 feet in length shall be provided with approved provisions for the turning around of fire apparatus.

"(i) Bridges. When a bridge is required to be used as access under this section, it shall be constructed and maintained in accordance with the applicable sections of the Building Code and using designed live loading sufficient to carry the imposed loads of fire apparatus.

Mr. Glen T. Koyama
Page 3
April 25, 1996

"(j) Grade. The gradient for a fire apparatus access road shall not exceed the maximum approved by the chief." (15%)

"(k) Obstruction. The required width of any fire apparatus access road shall not be obstructed in any manner, including parking of vehicles. Minimum required widths and clearances established under this section shall be maintained at all times.

"(l) Signs. When required by the fire chief, approved signs or other approved notices shall be provided and maintained for fire apparatus access roads to identify such roads and prohibit the obstruction thereof or both."

"INSTALLATION AND MAINTENANCE OF FIRE-PROTECTION, LIFE-SAFETY SYSTEMS AND APPLIANCES

"Installation

"Sec. 10.301. (a) Type Required. The chief shall designate the type and number of fire appliances to be installed and maintained in and upon all buildings and premises in the jurisdiction other than private dwellings. This shall be done according to the relative severity of probable fire, including the rapidity with which it may spread. Such appliances shall be of a type suitable for the probable class of fire associated with such building or premises and shall have approval of the chief.

"(b) Special Hazards. In occupancies of an especially hazardous nature or where special hazards exist in addition to the normal hazard of the occupancy, or where access for fire apparatus is unduly difficult, additional safeguards may be required consisting of additional fire appliance units, more than one type of appliance, or special systems suitable for the protection of the hazard involved. Such devices or appliances may consist of automatic fire alarm systems or automatic sprinkler or water spray systems, standpipe and hose, fixed or portable fire extinguishers, suitable asbestos blankets, breathing apparatus, manual or automatic covers, carbon dioxide, foam, halogenated and dry chemical or other special fire-extinguishing systems. Where such systems are installed, they shall be in accordance with the applicable Uniform Fire Code Standards or standards of the National Fire Protection Association when Uniform Fire Code Standards do not apply.

Mr. Glen T. Koyama
Page 4
April 25, 1996

"(c) Water Supply. An approved water supply capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings or portions of buildings are hereafter constructed, in accordance with the respective county water requirements. There shall be provided, when required by the chief, on-site fire hydrants and mains capable of supplying the required fire flow.

"Water supply may consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

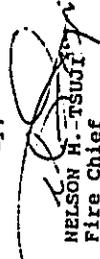
"The location, number and type of fire hydrants connected to a water supply capable of delivering the required fire flow shall be protected as set forth by the respective county water requirements. All hydrants shall be accessible to the fire department apparatus by roadways meeting the requirements of Section 10.207.

"(d) Fire Hydrant Markers. When required by the chief, hydrant locations shall be identified by the installation of reflective markers.

"(e) Timing of Installation. When fire protection facilities are to be installed by the developer, such facilities including all surface access roads shall be installed and made serviceable prior to and during the time of construction. When alternate methods of protection, as approved by the chief, are provided, the above may be modified or waived.

"(f) All fire alarm systems, fire hydrant systems, fire extinguishing systems (including automatic sprinklers), Class I, II, III (combination standpipe system) and combined systems, basement inlet pipes, and other fire protection systems and appurtenances thereto shall meet the approval of the fire department as to installation and location and shall be subject to periodic tests as required herein. Plans and specifications shall be submitted to the fire department for review and approval prior to installation."

Sincerely,


NELSON H. TSUJII
Fire Chief

NMT/mo



BELT COLLINS
H A W A I I

June 21, 1996
633-0500/96A-295

Mr. Nelson M. Tsuji, Fire Chief
Fire Department
County of Hawaii
466 Kinoole Street
Hilo, Hawaii 96720-2983

Dear Chief Tsuji:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

Thank you for your letter of April 25, 1996 regarding the Hawaii Community Correctional Center. The proposed project will comply with the Fire Code of the County of Hawaii. Construction plans of the new building have been recently submitted to your department for review.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

GTK:gk

cc: Ted Sakai
Beryl Iramina

KAUNAMA 1 MILE KUMIAI
57 Hualihii Street
Hilo, Hawaii 96720

... 3 P 1:53

Mr. Glen T. Koyama
May 6, 1996
Page 2 of 2

May 6, 1996

Mr. Glen T. Koyama
BELT COLLINS HAWAII LTD.
680 Ala Moana Blvd., First Floor
Honolulu, Hawaii 96813-5406

Subject: Draft Environmental Assessment
Proposed Housing Facility
Hawaii Community Correctional Center
TMK: 2-3-23:5 Hilo, Hawaii

Gentlemen;

We received a copy of your Draft Environmental Assessment dated April 12, 1996 for the subject project.

As residents of the surrounding prison facility we are not familiar with the function of the prison management. We are informed about prison problems from the morning editions of the Hawaii Tribune Herald, Advertiser, West Hawaii Today, evening Star Bulletin and the radio and television news. We are made aware that there is no 100% secure prison and the matter of minimum security prisons are just a dubious question. There are escapes from work details, furlough pardons who are repeat robbers, stalkers, child molesters, drug pushers and abusers, and other felons.

Many of the senior citizens, and retirees who have lived in the surrounding area for 40 years or more will be confronted with the impact of a prison compound which is not compatible with the existing residences and schools. The greatest concern is the impact of prisoners to society.

Seventy five or more years ago the County Jail was started at this location, but today the expansion of Hilo and the residential nature of the district has outpaced the archaic concept of a prison in this location.

It is requested that the government officials reconsider additional prison facilities at this location and should seriously consider relocation of the entire prison compound to eliminate the societal impact and stigma of residing near a prison.

The citizens of this community will certainly appreciate your kokua to our request.

One of the newest buildings which was recently completed has a "security fence" consisting of 16' high chain link fencing with a topping of concertina wire to incarcerate felons. This hardly compares to a statement on page 8 of the report regarding "the complex has the appearance of a college campus."

Very truly yours,


Morio Okamoto, President
KAUMANA 1 MILE KUMIAI

cc: Senator Richard Matsuura
Senator Malama Solomon
Representative Jerry Chang
Representative Dwight Takamine
Mayor Stephen Yamashiro
and Council Members

Steve M... & visitor



BELT COLLINS
H A W A I I

June 24, 1996
96F-333/633.0300

Mr. Morio Okamoto, President
Kaumana 1 Millie Kumiai
57 Hualilili Street
Hilo, Hawaii 96720

Dear Mr. Okamoto:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

Thank you for your letter of May 6, 1996 regarding the Hawaii Community Correctional Center. The HCCC is faced with an overwhelming need to reduce the overcrowded conditions at its Hilo facility. A new pre-trial housing unit would tremendously relieve the pressures within the existing complex. The proposed facility is not intended to bring new inmates to the correctional center, but to take inmates out of existing crowded quarters and place them in more suitable quarters in the new building.

With today's limited State budget, the location of the building within the existing HCCC will help reduce the cost of acquiring new land and developing new infrastructure. These could be the most expensive part of the project. The Hilo site will also reduce the amount of time spent on transferring detainees between the detention center and courtrooms.

We understand the community's concern regarding prison security and inmate behavior displayed at passersby and neighboring residents. HCCC officials have already begun evaluating and planning for improved management and security measures that would alleviate most, if not virtually all of the problems. One of the key components in keeping on top of these problems before they become irreversible is the establishment of a community resource group that is planning to meet with HCCC officials to express concerns, exchange ideas, and discuss possible mitigation measures. Many of the proposed mitigation measures are expected to improve the compatibility of the project with the surrounding neighborhood.

The Department of Public Safety is quite serious about the public safety of its neighbors and will continue to work in earnest with the residents to be a good neighbor. We look forward to any further concerns you might have regarding the project.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

GTK:dif

cc: Ted Sakai
Beryl Iramina

640 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5106 U.S.A. TEL: 808 531-5101 FAX: 808 531-7819
ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL CONSULTING
HAWAII • SINGAPORE • IRVING KOREA • AUSTRALIA • THAILAND • U.R.I.A.M

May 27, 1996

Ms. Beryl Iramina, Warden
Hawaii Community Correctional Center
State of Hawaii
60 Punahoele Street
Hilo, HI 96720

TWK: 2-3-023:006
Portion of Grant 8226
Pihoonua House Lots, 3rd Series
Pihoonua, South Hilo, Hawaii

Dear Ms. Iramina:

This is a follow up letter to our conversation regarding the maintaining of the ditch that traverses through my property. Enclosed please find a copy of a letter dated April 25, 1983 from James J. Deior, Land Management Administrator stating ownership of the 15-foot-wide ditch is vested to the State of Hawaii, paragraph 2. I'm also enclosing pictures which shows that the State did not at any time upkeep the ditch.

Lack of maintenance to the ditch has caused massive erosion to my property. In 1994, the County of Hawaii, Real Property Tax Division acknowledged the loss and approved tax exemption. To relieve flooding to my property, the Department of Public Works, County of Hawaii constructed a culvert that same year.

Please review the enclosed documents and pictures and any assistance in construction of a retaining wall will be greatly appreciated. You may contact me at (808) 969-6766 or pager #925-2259.

Sincerely,

Rudolph P. Spencer

Rudolph P. Spencer

Enclosures

WALTER A. JENNINGS
Director of Public Works



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF LAND MANAGEMENT

W. A. JENNINGS
Director
April 25, 1983

Mr. Rudolph P. Spencer
P. O. Box 1754
Hilo, HI 96720

Dear Mr. Spencers:

This follows our letter of March 31, 1983, regarding the ownership of the ditch described in documents for Grant 8226, Lot 38 of the Pihoonua Houselots, Third Series, South Hilo, Hawaii.

Please be advised that a search of the records in the Department of Land and Natural Resources did not disclose a deed nor grant of easement for the ditch in question. Accordingly, ownership of the 15-foot-wide ditch, containing an area of 3,810 square feet excepted and reserved from Land Patent Grant No. 8226, is vested in the State of Hawaii (as successor to the territory of Hawaii).

In light of our findings, kindly consult Messrs. Glenn Taguchi or Mark Cushman of our Hawaii District Land Office in Hilo at 961-7317 should it be necessary to purchase the ditch in question to comply with subdivision and zoning requirements of the County of Hawaii.

For your information, the grant executed by and between the Trustees of the Hilo Boarding School and the County of Hawaii, dated January 22, 1943, and recorded February 15, 1943, in Liber 1743, page 184, conveyed water rights in Waiuku River appurtenant to Land Commission Award No. 387, part 4, Section 1, together with all water, water rights, ditches, easements, intakes and dams connected with or appurtenant to said water rights. If required, further information on the extent of said water rights should be obtained from the Survey Division, Department of Public Works, County of Hawaii.



BELT COLLINS
H A W A I I

June 24, 1996
96P-3371633-0500

Mr. Rudolph P. Spencer
P.O. Box 1754
Hilo, Hawaii 96720

Dear Mr. Spencer:

Environmental Assessment
Hawaii Community Correctional Center
Hilo, Hawaii

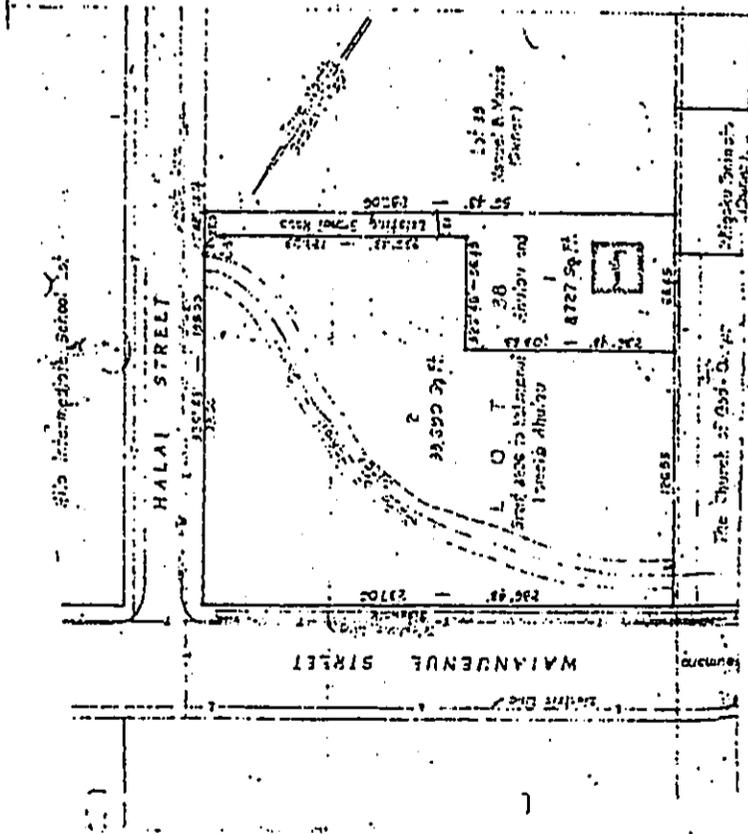
Thank you for your letter of May 27, 1996 regarding the ditch on your property. Although we do not believe the proposed project will directly impact your property, the Department of Public Safety will review the flooding situation in your area and work with you to address this problem. Thank you for bringing this matter to our attention.

Sincerely yours,
BELT COLLINS HAWAII LTD.

Glen T. Koyama
Glen T. Koyama

GTK:lf

cc: Ted Sakai
Beryl Iramina



Subdivision of Lot 11
Grant 822 to Kalarani Ahui'u and Laniako Ahui'u
Pihonua House Lots and Series
Pihonua South Side, Hilo, Hawaii
Survey 5 plan by Murray, Smith & Associates, Ltd.
82-561 27 810

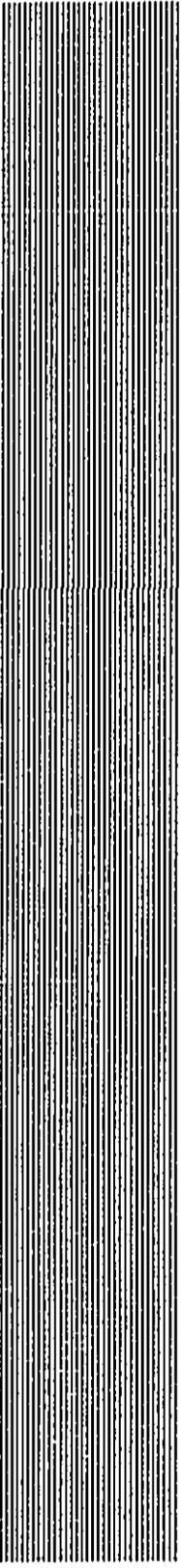


Mr. Josephine Spencer
Address: 621 Waiannuene St.
Hilo, HI 96720
5/11/96

APPENDIX

Limited Archaeological Inventory Survey
Proposed Housing Facility
Hawaii Community Correctional Center

Report 1736-050696



**Limited Archaeological
Inventory Survey
Proposed Housing Facility
Hawaii Community
Correctional Center**

Land of Pi'ihonua, South Hilo District
Island of Hawai'i

PHRI

Paul H. Rosendahl, Ph.D., Inc.

Archaeological • Historical • Cultural Resource Management Studies & Services

**Limited Archaeological
Inventory Survey
Proposed Housing Facility
Hawaii Community
Correctional Center**

Land of Pi'ihonua, South Hilo District
Island of Hawai'i (TMK:3-2-3-23:Por.5)

BY

*Alan T. Walker, B.A. • Projects Director - Hawai'i
Kepā Maly • Cultural Resources Specialist
and
Paul H. Rosendahl, Ph.D. • Principal Archaeologist*

PREPARED FOR

*Architects Hawaii, Ltd.
c/o Mr. Glen Koyama
Belt Collins Hawaii
680 Ala Moana Blvd., First Floor
Honolulu, Hawai'i 96813-5406*

JUNE 1996

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PHRI Paul H. Rosendahl, Ph.D., Inc.
Archaeological • Historical • Cultural Resource Management Studies & Services
HAWAII: 204 Waiānuenuē Avenue • Hilo, Hawaii 96720 • (808) 969-1763 • GUAM: P.O. Box 23305 • G.M.F., Guam 96921 • (671) 472-3117

SUMMARY

At the request of Mr. Glen Koyama, of Belt Collins Hawaii (BCH), on behalf of Architects Hawaii, Ltd., and for the State of Hawaii Department of Public Safety-Corrections Division, Paul H. Rosendahl, Ph.D., Inc. (PHRI), conducted a limited archaeological inventory survey of the site for the proposed Housing Facility planned for the current Hawaii Community Correctional Center parcel. The parcel is situated in the Land of Pi'ihonua, South Hilo District, Island of Hawai'i (TMK:3-2-3-23:Por.5). The specific objective of the limited archaeological inventory survey was to provide information concerning the probable age and function of two previously noted ditches that was requested by DLNR-SHPD in their recent Draft Environmental Assessment review letter (letter of May 8, 1996, from D. Hibbard, Administrator to G. Koyama, BCH).

The field work was conducted on June 4, 1996 by Projects Director - Hawai'i Alan T. Walker, B.A., and Field Archaeologist Blair McPhatter, B.A. Principal Archaeologist Dr. Paul H. Rosendahl provided overall guidance for the project. Survey field work took about 16 man-hours to complete.

Two sites within the project area were recorded. The two sites (State Inventory of Historic Places Sites 20848 and 20849) are both historic period features. Site 20848 is an early historic period ditch that provided water to downslope residential and agricultural sites, and Site 20849 is a more recent historic period ditch that was built to channel run-off from the Pi'ihonua House Lots 3rd Subdivision (immediately upslope of Komohana Street).

Both sites are assessed as no longer significant and require no further work. Sites 20848 and 20849 have been measured, described, and photographed, and their locations have been plotted on appropriate maps. The data collected from them during the present survey are considered sufficient recovery of significant information, and the sites need not be preserved.

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INTRODUCTION

BACKGROUND

At the request of Mr. Glen Koyama, of Belt Collins Hawaii (BCH), on behalf of Architects Hawaii, Ltd., and for the State of Hawaii Department of Public Safety-Corrections Division, Paul H. Rosendahl, Ph.D., Inc. (PHRI), conducted a limited archaeological inventory survey of the site for the proposed Housing Facility planned for the current Hawaii Community Correctional Center parcel. The parcel is situated in the Land of Pi'ihonua, South Hilo District, Island of Hawai'i (TMK:3-2-3-23:Por.5) (Figures 1, 2 and 3). The overall objective of the survey was to provide information appropriate and sufficient to satisfy all current historic preservation regulatory review requirements of the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD), as outlined within the DLNR-SHPD draft rules and regulations for historic preservation review and related activities (DLNR 1994). Specifically, the objective of the survey was to provide information concerning the probable age and function of two previously noted ditches that was requested by DLNR-SHPD in their recent Draft Environmental Assessment (EA) review letter (letter of May 8, 1996, from D. Hibbard, Administrator to G. Koyama, BCH).

SCOPE OF WORK

The basic purpose of an inventory survey is to identify all sites and features of potential archaeological significance present within a specified project area. An inventory survey is the initial level of archaeological investigation. It is conducted with the basic aim of determining the presence or absence of archaeological resources within a specified project area. It indicates both the general nature and variety of archaeological remains present, and the general distribution and density of such remains. Finally, it permits a general significance assessment of the archaeological resources, and facilitates formulation of recommendations and estimates for any further work that might be necessary or appropriate. Such work could include further data collection (additional data collection involving detailed recording of sites and features, selected limited excavations, and possibly subsequent mitigation), data recovery research excavations, construction monitoring, interpretive planning and development, and/or preservation of sites and features with significant scientific research, interpretive, and/or cultural values.

The specific objectives of an inventory survey are fourfold: (a) to identify all sites and site complexes present within the project area; (b) to evaluate the general significance of all identified archaeological remains; (c) to determine the possible impacts of proposed development upon the identified remains; and (d) to define the general scope of any subsequent further data collection and/or other mitigation work that might be necessary or appropriate.

Based on a review of readily available background literature, familiarity with the general project area and the current requirements of pertinent review authorities, and discussions with Dr. Ross H. Cordy, DLNR-SHPD Chief Archaeologist, the following specific tasks were determined to constitute an adequate and appropriate scope of work for the limited inventory survey, in order to comply with current historic preservation review requirements:

1. Review archaeological and historical documentary background literature relevant to the project area;

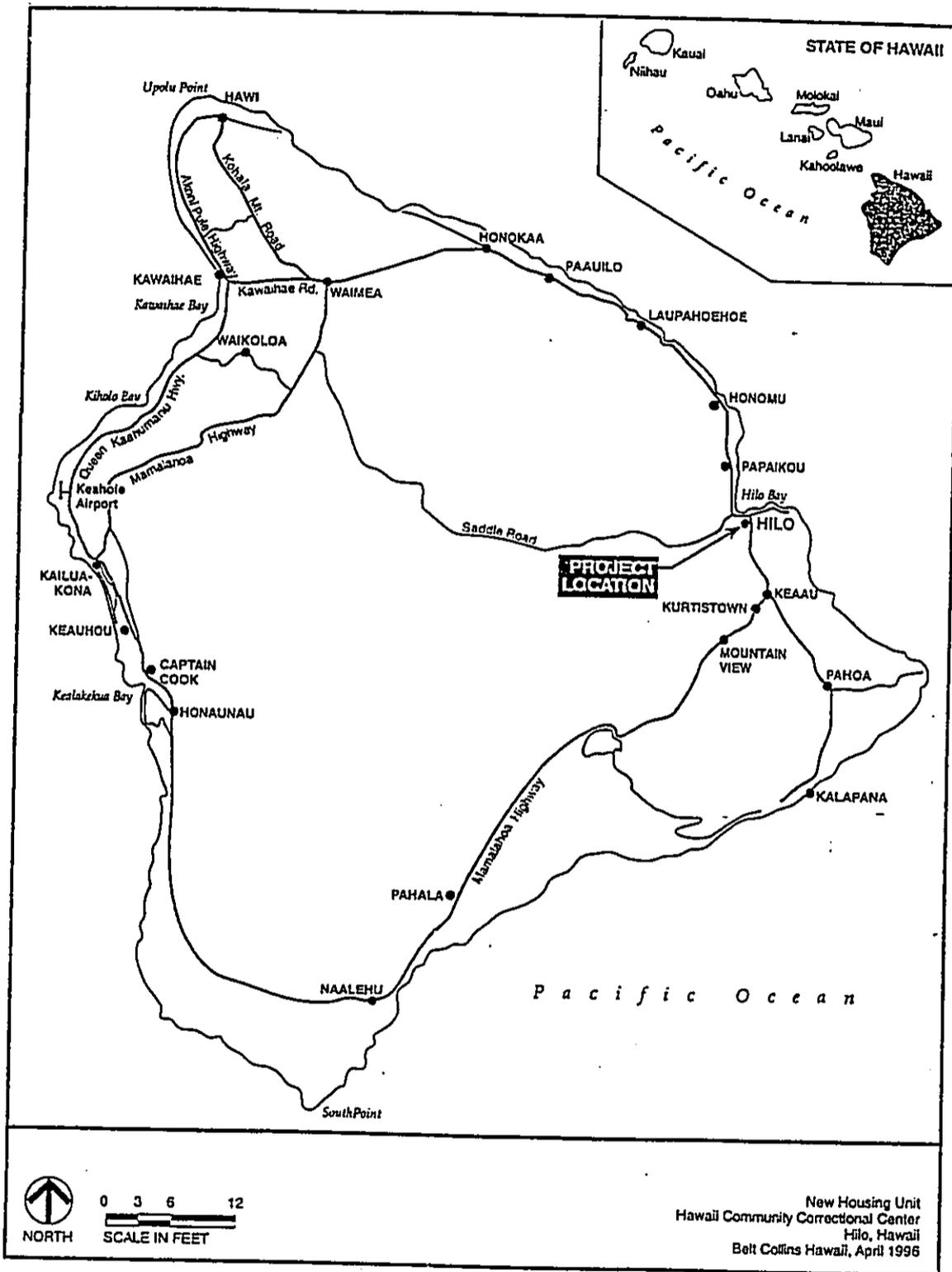


Figure 1. Project Area Location

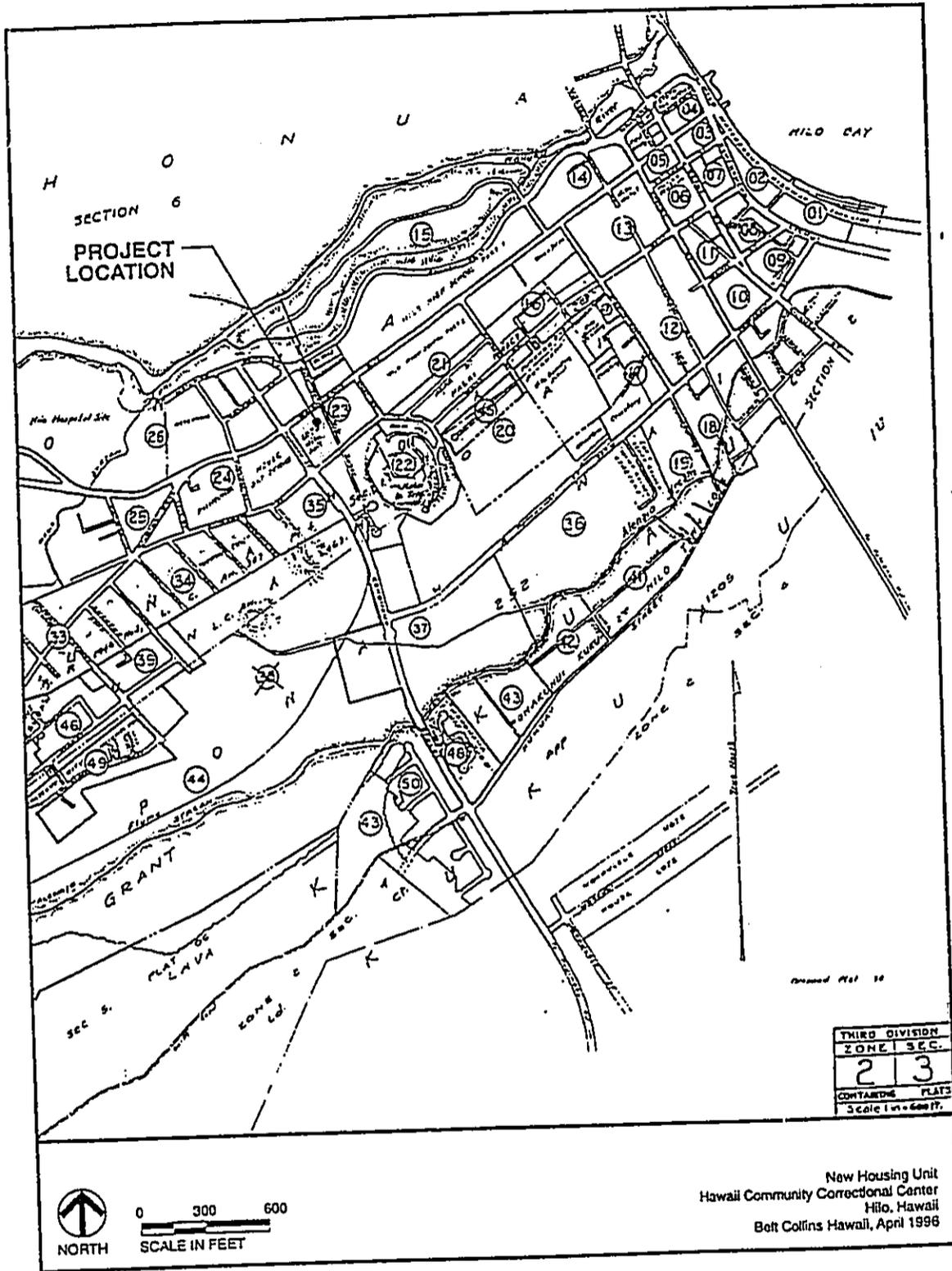


Figure 2. Tax Map Showing Project Area Location

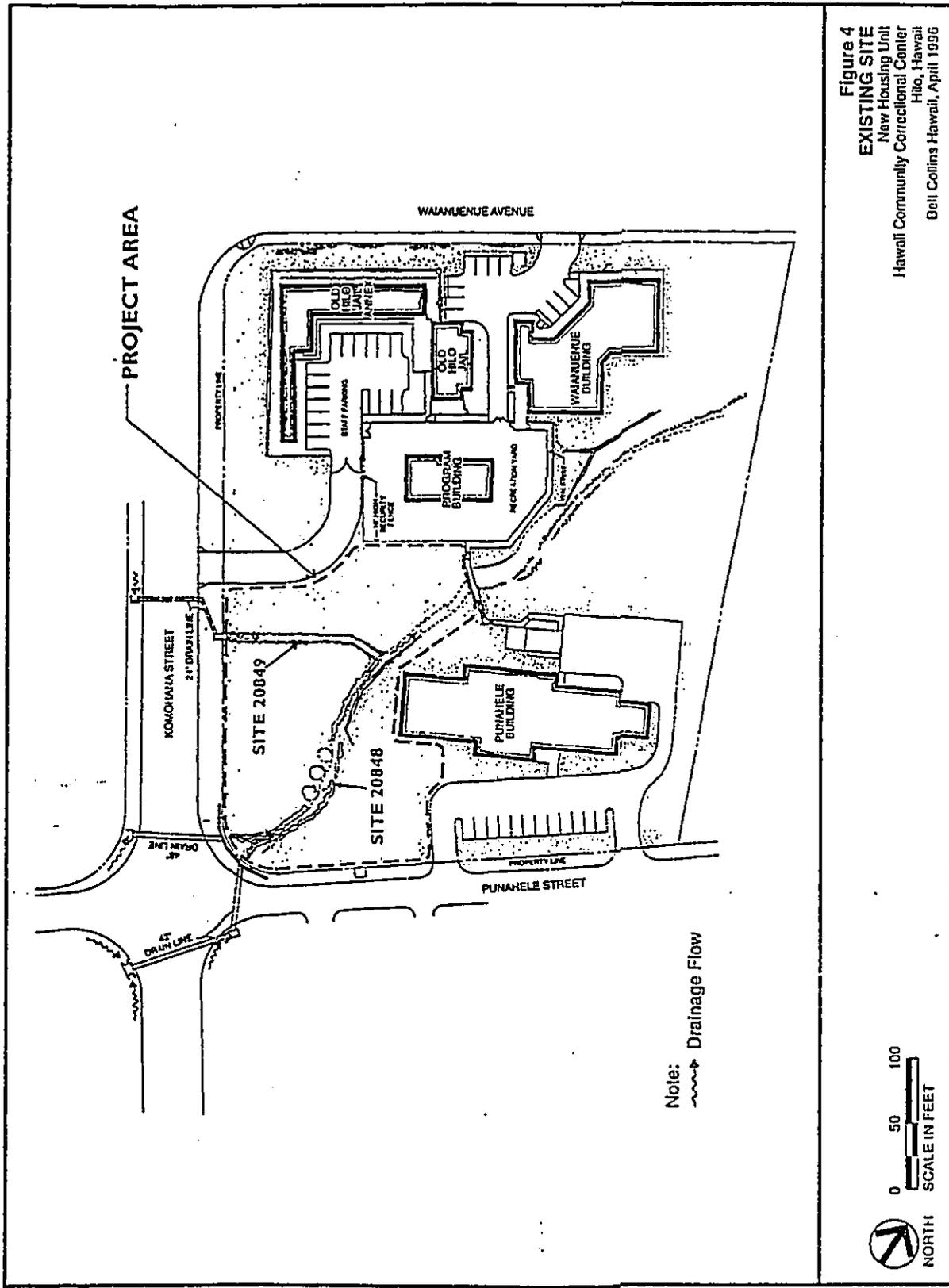


Figure 4
EXISTING SITE
New Housing Unit
Hawaii Community Correctional Center
Hilo, Hawaii
Bell Collins Hawaii, April 1996

Figure 3. Detail of Project Area Vicinity

2. Conduct field work consisting of detailed recording of two historic ditch features; and
3. Analyze background and field data, and prepare appropriate reports.

All work was carried out in accordance with the current standards for historic preservation work required by DLNR-SHPD. The significance of all archaeological remains identified within the project area have been assessed in terms of (a) the National Register criteria contained in the Code of Federal Regulations (36 CFR Part 60), and (b) the criteria for evaluation of traditional cultural values prepared by the National Park Service (1990). DLNR-SHPD use these criteria to evaluate eligibility for both the Hawaii State and National Registers of Historic Places. The Hawaii State guidelines utilize an additional fifth criteria (E) which defines significant cultural resources as ones that "have an important traditional cultural contribution or value to the native Hawaiian people or to other ethnic groups of the state" (DLNR 1994:A:10). Examples of sites that could be evaluated as significant under Criterion E include *heiau*, cemeteries, burials, and trails.

To further facilitate client management decisions regarding the subsequent treatment of resources, the general significance of all archaeological remains identified during the survey was also evaluated in terms of three PHRI cultural resource management value modes, which are derived from the above federal evaluation criteria. Sites were evaluated in terms of potential scientific research, interpretive, and/or cultural values. Scientific research value refers to the potential of archaeological resources for producing information useful in the understanding of culture history, past lifeways, and cultural processes at the local, regional, and interregional levels of organization. Interpretive value refers to the potential of archaeological resources for public education and recreation. Cultural value, within the framework for significance evaluation used here, refers to the potential of archaeological resources for the preservation and promotion of cultural and ethnic identity and values.

PROJECT AREA DESCRIPTION

The project area parcel is located in the city of Hilo, at the corner of Komohana Street and Punahale Street, in the Land of Pi'ihonua, South Hilo District, Island of Hawai'i (TMK:3-2-3-23:Por.5) (Figures 1, 2, and 3). The project area borders the Hawaii Community Correctional Center Program Building and security fence, on the north, and the Punahale Building, on the east. The parcel is approximately 0.8 acres and measures approximately 239 ft. (81 m) by 185 ft. (63 m). The entire area is surrounded by existing residential development.

Terrain within the project area slopes gently from west to the east. Soils are primarily of the Hilo Series, which are well-drained silty clay loams that are banded in appearance, having been formed in a series of volcanic ash falls (Sato et al. 1973). The project area contains Hilo silty clay loam (0-10% slopes), which is found on the lower slopes of windward Mauna Kea. This soil generally has a surface layer of dark brown silty clay loam approximately 12 inches thick. The lower layer generally consists of about 48 inches of dark brown, dark reddish-brown, and very dark grayish-brown silty clay loams. Fine, gravel-sized aggregates are formed when this soil dries. This process is irreversible. Hilo silty clay loam was primarily used for cultivation of sugar cane; however, most of these areas are now fallow, with other parcels used for growing truck crops, for orchards, and for pasture.

The elevation in the project area is c. 240 ft above mean sea level (AMSL), and rainfall in the general vicinity of the project area averages approximately 150 inches per year. The average

annual temperature ranges from 70 to 75 degrees F. (Armstrong 1983). The project area is landscaped, with most of the area in lawn. Also present are *ki* (*Cordyline terminalis* [L.] Kunth), *kalo* (*Colocasia esculenta* (L.) Schott), *laua'e* (*Microsorium scolopendria* (Berm.) Copel), ginger (Zingiberaceae), Job's tears (*Coix lacryma-jobi* L.), night cestrum (*Cestrum nocturnum* L.), heliconia (*Heliconia* spp.), Alexandra palms (*Archontophoenix alexandrae*), and solitaire palms (*Ptychosperma elegans*). The overall visibility within the project area is excellent.

HISTORICAL DOCUMENTARY RESEARCH

By *Kepā Maly, Cultural Resources Specialist*

Background

In a letter to Mr. Glen Koyama, of Belt Collins Hawaii (dated May 8, 1996), Dr. Don Hibbard, Administrator with the Department of Land and Natural Resources-State Historic Preservation Division, raised questions regarding the age and function of sections of two ditches situated in the HCCC study area. In an attempt to resolve these questions, Cultural Resources Specialist Kepā Maly reviewed documents pertaining to the Hilo Boarding School Ditch and to the transfer of lands to the Hawaii Community Correctional Facility (HCCC). The review was conducted May 31 through June 3, 1996, in Hilo, and relevant materials were located and reviewed at several locations. Because the Hilo office of the State Survey Branch was closed recently, and because the scope of work and budget for this limited study did not provide for travel to Honolulu (where the relevant documents are now housed), records from that agency were not reviewed. The documents available in Hilo provided information confirming that neither of the two ditches is the Hilo Boarding School Ditch. Other ditches in the area were mentioned (see text in bold, below). It is likely that further research in Honolulu could provide additional information. Below is a summary of the results of the research.*

Records of the Public Works Division

The County of Hawaii Public Works Division allowed PHRI to copy material in files relating to the subdivision of the "Piihonua House Lots, 3rd Series," situated just *mauka* of the study area. The Public Works files included two maps, (a) an undated blue-line copy of a map of the "Hilo Sugar Co's Fields," showing land use and geographic features of the Hilo Community, and (b) a map of the Piihonua House Lots, 3rd Series (dated 1922). Interestingly, while both maps (*Figures 4 and 5*) show the Hilo Boarding School Ditch, they place it in different locations (neither of which is within the study area). *Figure 4* shows it running on the northwest side of Hāla'i Hill, and *Figure 5* shows it running along Waiānuenue Avenue. Both maps also show the drainage that runs diagonally (roughly south to north) through the study area property as a natural drainage, with no indication of modification at the time the maps were made.

A copy of Executive Order No. 2923 (July 15, 1978), setting aside the 3.819 acre parcel for HCCC Facility, was also obtained from the Department of Public Works. It was hoped that the meets and bounds descriptions in the Executive Order might mention ditches or drainages, but this was not the case. Additionally, a review of the Piihonua Subdivision records contained no references to ditches or drainages running from the *mauka* side of Komohana Street into the study area.

* The author wishes to thank Trevor Jackson of the County of Hawaii, Department of Public Works, and Charlene Dalquist of the Lyman House Memorial Museum Library for their assistance in the identification of available documents.

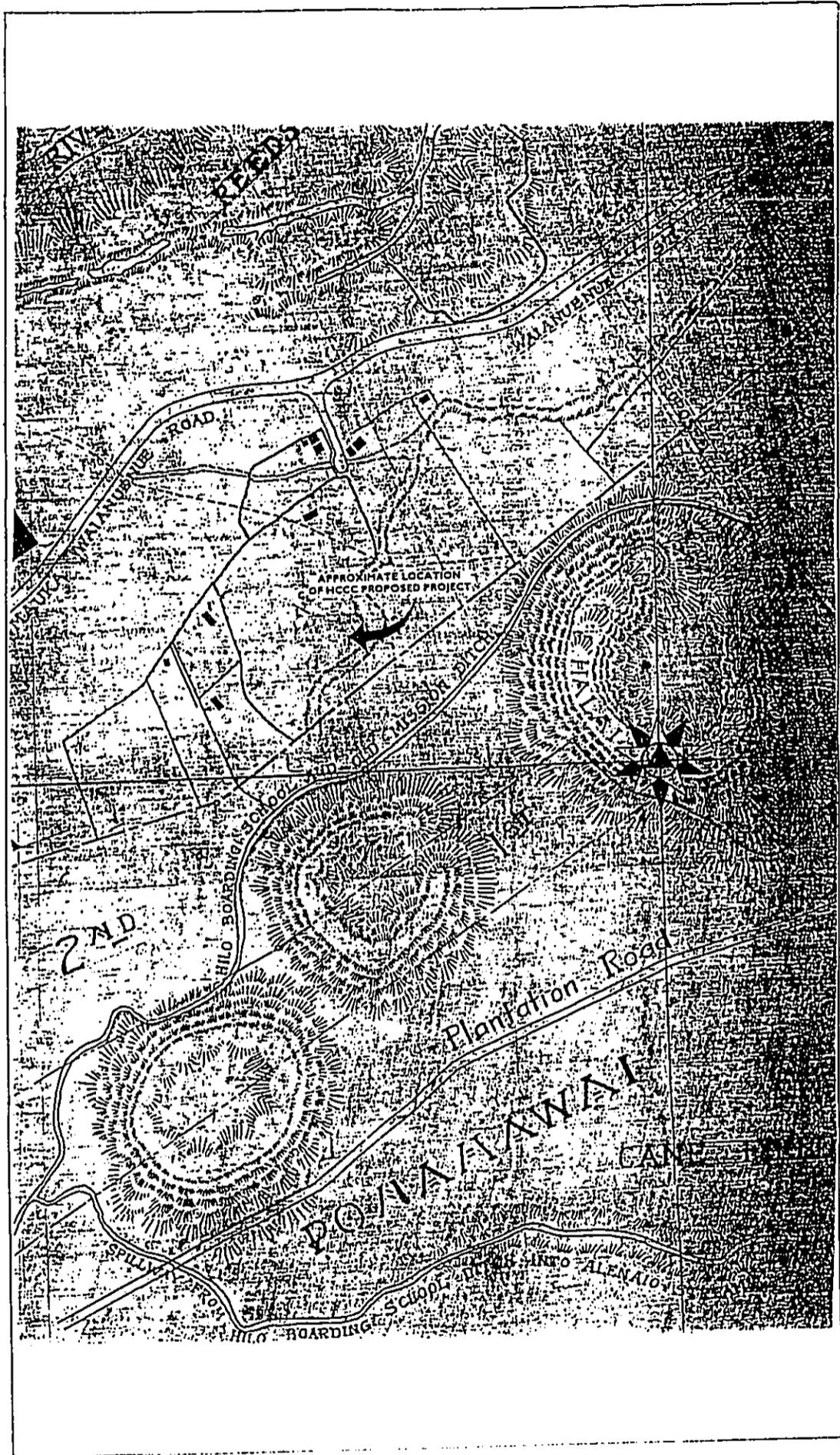


Figure 4. Map Showing Hilo Sugar Company Fields
(from Co. of Hawaii Dept. of Public Works, Ref. No. G111-23-10)

DOCUMENT CAPTURED AS RECEIVED

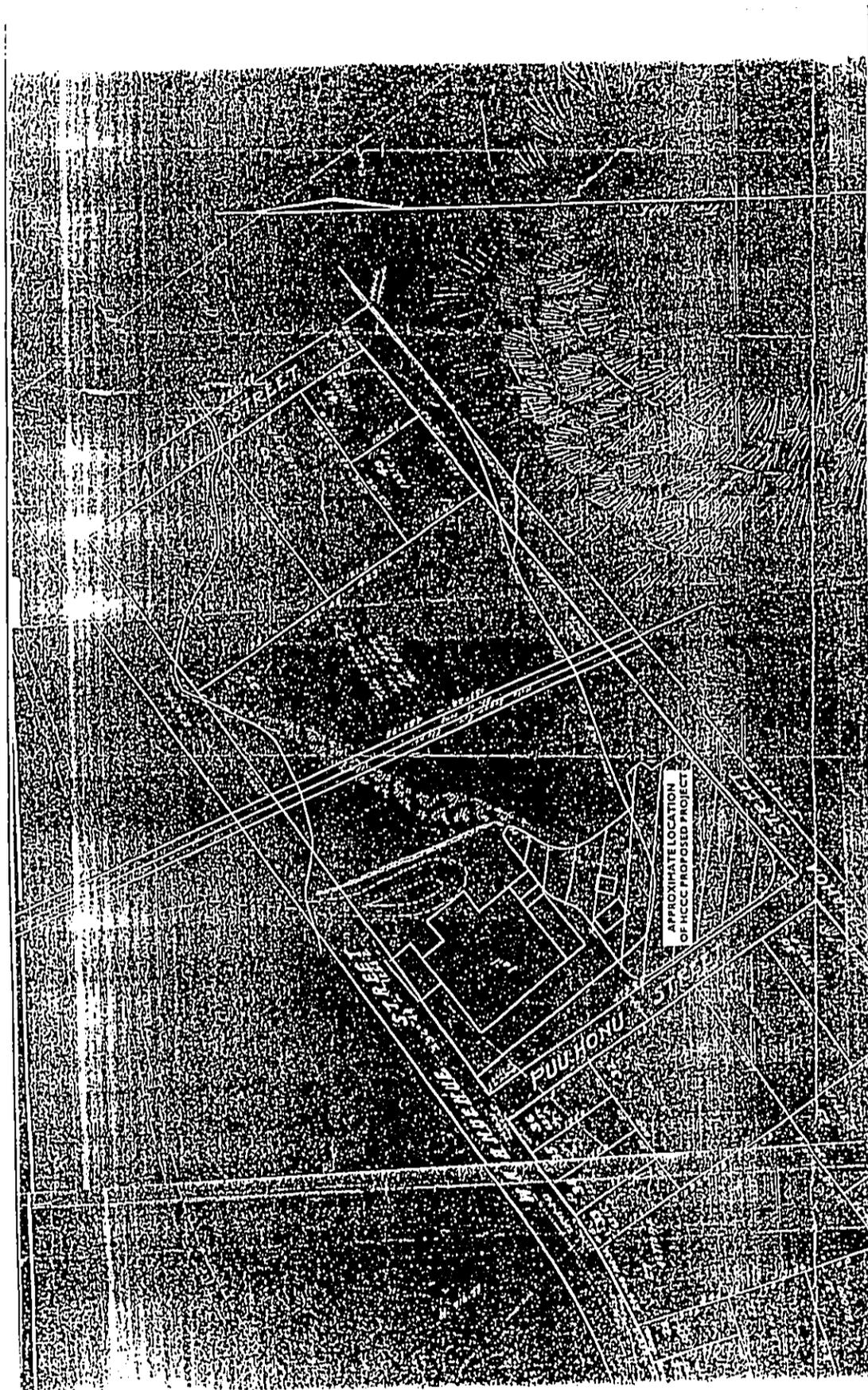


Figure 5. Puhonua House Lots, 3rd Series
(from Co. of Hawaii Dept. of Public Works, Ref. No. H-233)

Records at the Hawaii County Planning Department were also checked. The Planning Department files for TMK:2-3-23:5,23 contain only recent documentation, none of which appears to make any reference to the presence or function of ditches in the vicinity of the HCCC Facility or the Piihonua House Lots. Records at both the Department of Public Works and Planning Department mention survey records and maps, but as noted above, the Hilo office of the State Survey Branch was closed recently, it was not possible to travel to Honolulu for this study. During work for earlier projects, the author has copied additional archived maps of Hilo from the Honolulu branch of the Real Property Tax Office (dated c. 1920-1930). A review of these showed that none provides any documentation of the HBS Ditch.

Lyman House Memorial Museum Library Records

The author also reviewed the library manuscript files on the Hilo Boarding School, and legal files on Land Matters, and Water Rights contained in the archival collection of the Lyman House Memorial Museum (LHMM) library. Several of informative records were located.

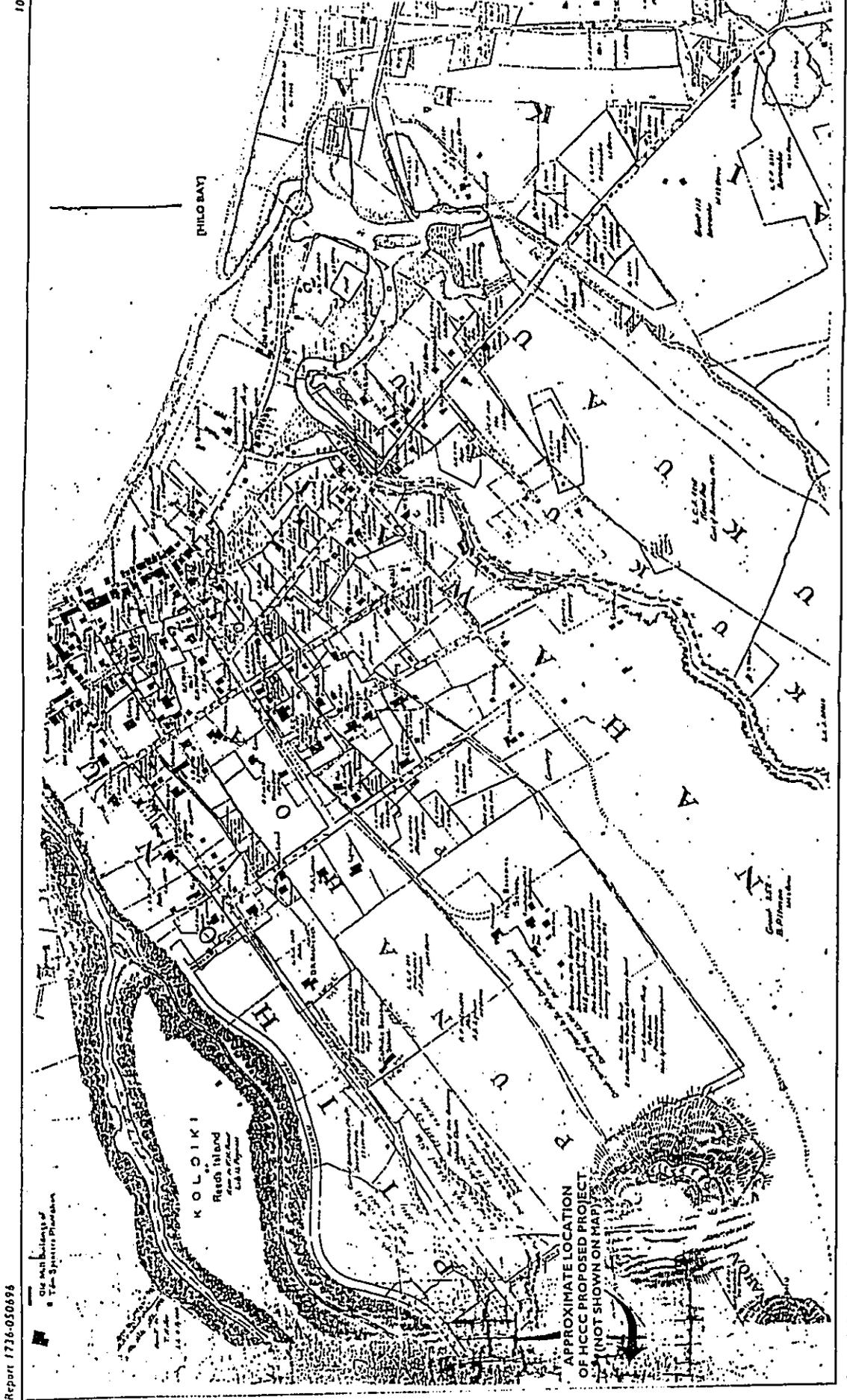
While reviewing the records, including several chronological histories of the HBS dating from the 1880s to the 1920s, a surprising omission was noted. Almost none of the accounts for the HBS make any reference to the history of the ditch or to its operations; nor do they discuss the role of water in the life and programs of the school – including agricultural programs, the dairy, the ice plant and domestic uses. No historic maps are recorded as being curated in the LHMM library collection. Thus, while the information below, provides readers with an adequate historical record of the age and functions of the HBS Ditch, the exact location of many features is not clear.

Testimonies Concerning the History, Age, and Functions of the "Hilo Boarding School" Ditches

In February 1912, several testimonies were taken and recorded with regard to the water rights of the Hilo Boarding School. Among these testimonies were the statements of Frank Swartz Lyman, born in Hilo in 1837 (Lyman 1912), and, very likely*, testimony of Solomon P. Kaleioholani (also known as Peleioholani). Keleioholani (born at Waiākea in 1845) described development of ditches for the "village of Hilo," with the first of the ditches being built under the rule of the chief 'I, prior to the reign of Kamehameha I. The 'auwai (water channel) attributed to 'I provided water to residents of Hilo, some of whom had previously needed to go to the Wailuku River for water (Kelly 1982:19-23).

Probably due to his life-long association with the Hilo Boarding School, his occupation as a surveyor and land agent, and his service as the Circuit and Probate Judge of the district, F.S. Lyman's testimony was the most detailed of those reviewed. Of particular geographical interest for the current study, Lyman reported that he had been told that the ditch was initially constructed to transport water to the *ahupua'a* of Punahoa (which included Hālai Hill), which had no water sources of its own. Lyman provides a detailed outline of the ditch's route, the *makai* portion of which may be located by reference points on an 1891 Map of Hilo Town and Vicinity (Figure 6). Excerpts of Lyman's testimony (Lyman 1912) follow:

* Kelly obtained a copy of Kaleioholani's testimony through a personal contact who was an amateur historian. Its source was not indicated.



Report 1736-050894

Figure 4. Portion of 1891 Map Showing Project Area Vicinity

I know the facts about the Water Rights of Hilo Boarding School, in the ditch leading from the south branch of the Wailuku River, District of South Hilo, Island of Hawaii, to the premises of the said Boarding School in the town of Hilo. I remember when a boy going up to the water head of the said Hilo Boarding School ditch with my father who was the Principal of said school, and saw the ditch and the water head, which was at the same place and size as it is now. The first time I went there was about 1845 - I was about 8 years old. I have been to the same place many times since that... [S]tarting in the South branch of the Wailuku River, about 4 1/2 miles from Hilo Town, and leading through said Hilo town. The water head and the water ditch are practically the same now as they were when I first saw them.

I was told when I was a boy, by P. Barenaba, when this ditch was made, and by whom. He was a *kamaaina*. He stated that he was a resident in the town of Hilo when the ditch was first made, and he knew all about its construction. He said that this water ditch was made to bring water from the South branch of the Wailuku River for the land of Punahoa, which had no water.

Almost every *Ahupuaa*, or strip of land by name, in the District of Hilo, each had its water ditch running through the inhabited portions of the land below the forest, for the use of its tenants. Punahoa had no stream of water, so a ditch was made by Aki, who had charge of the land of Punahoa for the King Kamehameha I. After two or three attempts he finally succeeded in bringing down the water in a ditch onto the land of Punahoa, and the ditch was named after him, "*Auwai o Aki*" (the water ditch of Aki), in the year 1813. This is the same ditch now owned by the Hilo Boarding School. At first the ditch was not very successful in bringing the water down; but Mr. Goodrich, the first American Missionary who came to Hilo, about 1822, lived on the land of Punahoa, and he improved the water ditch of Aki, and brought down a suitable supply of water for the use of the Punahoa land, while it was still under the supervision of the *Konohiki*, or caretaker of the land under the King.

Later on, about 1824, Mr. Goodrich planted sugar cane below Halai Hill in said Hilo, and ground the cane with a wooden mill, and water wheel, that he made, and operated by the water of this ditch. The mill was located directly above the present homestead of Rufus A. Lyman, on School Street, up nearly as far as the present Catholic School. From the Mill the water ditch went down through the land of Punahoa to the house of Mr. Goodrich, and other houses below, and on to the sea shore.

Practically this same statement was made to me by my father. In fact it was common knowledge and of common repute throughout the Hilo Community. The other matters herein stated are of my own knowledge... [LHMM Box 8, Folder 18, Record 83.15.16.7; Lyman Ms. 1912:1-3]

In the next section of his testimony, F.S. Lyman provides a detailed account of land matters associated with the boarding school and mission, from 1827 through 1853:

A Grant of 40 acres of land was made about 1853 by the Hawaiian Government for the use of the Hilo Boarding School... Lyman, Coan and Wetmore were the only ones entitled to water flowing through said ditch.

The new School Building was built...and a branch of the water ditch was taken in 1856, from the said ditch known as the Mission Ditch, at Halai Hill, and ran down through the new School premises... Later on Messrs. Coan and Wetmore arranged to take water from the Piihonua water ditch, at the Union School, to their houses, and discontinued using the said Mission ditch water, and gave their rights therein to the Hilo Boarding School. Father Lyman still continued to use the water, retaining a small stream that went from his house down the Church Street Ditch, as now. Later on, Father Lyman made other arrangements for water, and gave his right in the ditch to said Hilo Boarding School.

From the time the Boarding School was first started in 1836, they used the water from this ditch for their household purposes and for irrigating their *kalo* land whenever it was needed, and have continued to do so up to this time... [ibid.:4-5]

Lyman reports that use of the water from the HBS Ditch was the exclusive right of the Lyman, Coan, Wetmore and the Boarding School, but from 1869 to 1873, some Chinese taro farmers began taking water to the adjoining land of Ponahawai. This action was determined to be illegal and the rights of the missionaries and school were upheld (ibid.:5). In 1895, several school trustees and Hilo businessmen leased water from the Hilo Boarding School Ditch and began generating electricity to supply users in Hilo Town. The generator plant was located on Pitman Street and also powered a small ice plant, "...the water running from said ditch through a 6 inch pipe from the reservoir...situated below the school premises" (ibid.:8). The demand for electricity and ice was so great that by 1897, a 3,000 light dynamo was installed. Operation of the generator and new ten-ton ice plant required that additional water resources be made available (ibid.:9). Lyman records that the partners:

...put in a 36 inch water pipe near the top of Halai Hill using water from said ditch, with a fall of 185 feet; fluming the water of the ditch from the foot of the third Hill, across the second Hill and to near the top of the first Halai Hill, to the head of the Pipe line. [This portion of the testimony appears to refer to an area very near the present study area.]

...In 1901 a new company was formed to be run with water from the Wailuku River... Hilo Electric and Light Company, Limited;... When the location of the Electric and Ice Works was changed to the new location by the Wailuku River, it was deemed best to use the water of the Boarding School ditch, not reserved for the School, by returning it to the Wailuku River to flow down the new water head of the Electric Light Company above the Rainbow Falls. This was done by taking it out of the ditch just below the roadway near the office of the Hawaii Mill Company, some half mile below the said water head, and a ditch takes the water to the River near by [ibid.:9-10].

An October 11, 1926 historical sketch (Walker 1926) of the "Water Right Owned by the Hilo Boarding School" is unsigned, but attributed to Reverend G. Shannon Walker (of the boarding school). It provides further background and details concerning water use after Lyman's account above:

In 1813 King Kamehameha instructed the Chief [Aki as cited above] of the Hilo district to get out water from the Wailuku for the Haili Hill region. The

Chief did the best he could in carrying out the order but was unsuccessful until the first Missionaries came. They worked with the chief and constructed a ditch that was successful in bringing the water down. In 1846...the King deeded this water to the American Board in recognition of services rendered by the Missionaries.

When the American Board discontinued its connection [in 1863] with the work here, it divided the land and water right between the three resident missionaries—Coan, Wetmore and Lyman...When the water system was developed for the two, the Missionaries no longer had need of the water right so granted siad [sic] right to the Hilo Boarding School. In 1917 some question arose as to ownership and the water right case was settled in the Supreme Court in favor of the Hilo Boarding School. 5,590,000 gallons per every 24 hours to be their allotment.

During the summer of 1926 the County took for the use of Hilo and vicinity certain water from mauka of the H.B.S. intake which did not permit the established amount to enter the Boarding School Ditch. This permission was temporarily granted due to the drought then[.] [A]t the close of the same the County set about to establish ownership and invalidate [the] H.B.S. claim. An reliable agreement is reached and contract is pending at date (page 161, LHMM Water Right files).

Conclusion

The following conclusion is based on records of the LHMM Library, County of Hawaii, and studies of Hilo by Athens (1982) and Kelly (1982), cited above. It appears that the larger of the two ditches (Site 20848), which cuts diagonally across the project area (roughly south to north), is a modified natural drainage that may be associated with the Hilo Boarding School Ditch, but it is not the Boarding School Ditch itself. Based on the available evidence, and on field observations, it appears that the smaller ditch, which is crossed by Komohana Street (Site 20849), is associated with development of the subdivision itself, although the Piihonua House Lots Subdivision documents from the 1920s make no reference to the need of drainage ways to channel runoff. Like the drainage on the mauka side of Komohana, fronting the houses, the smaller ditch appears to be a public safety feature that makes use of the older, modified natural drainage. In the matter of the apparent cartographic discrepancies, the testimonies cited above clearly place the HBS Ditch along the northern side of Hāla'i Hill, and it is now probably under Punahele Street.

Should further information be desired, one option would be to conduct a detailed review of Survey Branch and Bureau of Conveyances records, in Hono!ulu. In addition, a limited oral historical study might be of value, as it is likely that there are still a few individuals of sufficient age, who could provide some additional site-specific details on the age and functions of ditches in and around the study area.

PREVIOUS ARCHAEOLOGICAL WORK

Previous archaeological work in the vicinity of the project area includes a reconnaissance survey by Athens (1982) for the Alenaio Stream Flood Damage Reduction Study. The portion

of his report that directly relates to the current project is referred to as Alignment 2. This alignment is proposed for immediately seaward (northeast) of the existing Hawaii Community Correctional Center.

Two sites were identified during the survey, (a) the Hilo Boarding School Ditch (which was used for irrigating *kalo* pond fields and generating electricity), and (b) a house probably used by a sugar plantation family (Athens 1982:6). The house site is located south of Halai Hill and is well outside the current project area. Athens writes that the area across Waianuenue Avenue and east of the old Hilo Jail (the jail is now HCCC) was used by prisoners for gardening. Athens also suggests that it is not unreasonable to believe that prehistoric agricultural use of the area occurred prior to construction of the Hilo Boarding School Ditch. Archaeological testing was recommended as appropriate further work for the former garden site, to determine the presence or absence of prehistoric or early historic agricultural remains.

Maly's information documents that the ditch that came to be known as the Hilo Boarding School Ditch was constructed in AD 1813 and was improved in AD 1822. Based on Maly's research, Site 20848 is a natural drainage that was possibly modified in the AD 1890s, in conjunction with other activities in this area, and was probably fed by the Hilo Boarding School Ditch. Site 20848 was possibly used for irrigating nearby fields. Site 20849 was most likely constructed in AD 1922, along with the Piihonua House Lots 3rd Subdivision, immediately upslope of Komohana Street. It was used to control run-off.

FIELD METHODS AND PROCEDURES

The 100% pedestrian survey was undertaken on June 4, 1996, by Director of Projects - Hawai'i Alan T. Walker, B.A., and Field Archaeologist Blair McPhatter, B.A. Principal Archaeologist Dr. Paul H. Rosendahl provided overall guidance for the project. The ground survey of the project area was accomplished by using a systematic series of transects, nearly all oriented at 135-315°, or approximately parallel to Komohana Street. The intervals between the crew members were five meters, due to the excellent visibility. The survey focused on identifying surface archaeological structures and any portable remains.

During the pedestrian survey, all transects were sequentially identified and as sites were identified, they were assigned sequential PHRI temporary numbers prefixed by "1736-" beginning with "1736-1". All sites were tagged with an aluminum strip bearing the letters "PHRI", the site number, PHRI project number (96-1736), and the date. All sites were plotted on a 1"=10' scale project map (2-ft contours) provided by Imata & Associates, Inc. All newly identified sites were subsequently assigned permanent State Inventory of Historic Places (SIHP) site numbers.

A PHRI site record form and map was completed for each of the sites found in the field. The site map was produced using the map provided by Imata & Associates, Inc. as a base map; features were plotted using a metric tape and compass. A complete 35 mm black-and-white photographic record of field work was kept (PHRI Roll No. 5095). No subsurface excavation was undertaken, but for the two identified ditches, three profiles bisecting the ditch were prepared.

FINDINGS

During the present survey, Sites 20848 and 20849 (both ditches) were documented (Table 1). The ditches are shown in plan view on Figure 7 (at end) and representative ditch profiles are shown on Figure 8. Based on the current field survey and on historical documents, Site 20848, appears to have functioned to transport water to the population along its route, and to transport water downslope for agriculture. Site 20849, based on the current field survey and on historical records, was probably built to control water run-off from the Piihonua House Lots, 3rd Subdivision, located immediately upslope (west) of Komohana Street

Table 1. Summary of Identified Sites

SIHP* Site No.	Formal Site/Feature Type	Functional Interpretations	#CRM Value Mode Assess.			+Completed Field Work Tasks		
			R	I	C	DR	SC	EX
20848	Ditch	Agriculture - domestic use	L	L	L	+	-	-
20849	Ditch	Drainage control	L	L	L	+	-	-

* State Inventory of Historic Places (SIHP) numbers. SIHP numbers are five-digit numbers prefixed by 50-10-35- (50=State of Hawaii; 10=Island of Hawaii; 35=USGS 7.5' series quad map [1982, "Hilo, Hawaii"]).

Cultural Resource Management Value Mode Assessment
 -Nature: R = scientific research, I = interpretive, C = cultural
 -Degree: H = high, M = moderate, L = low

+ Completed Field Work Tasks:
 DR = detailed recording (scaled drawings, photographs, and written descriptions),
 SC = surface collections
 EX = test excavations.

** Number of component features within complex.

STATE NO.: 20848

SITE Type: Ditch

TOPOGRAPHY: Gently sloping terrain (to east)

VEGETATION: Ground cover of grass with *ki* bordering ditch. *Kalo* (*Colocasia esculenta* (L.) Schott), *laua 'e* (*Microsorium scolopendria* (Burm.) Copel), ginger (*Zingiberaceae*), Job's tears (*Coix lacryma-jobi* L.), night cestrum (*Cestrum nocturnum* L.), and Heliconia (*Heliconia* spp.).

CONDITION: Fair-poor

INTEGRITY: Southern portion unaltered; central and northern portions altered

PROBABLE AGE: Early 19th century

FUNCTIONAL INTERPRETATION: Agriculture-domestic use

DIMENSIONS: 87.5+ m long by 0.2-0.3 m wide by 0.4-0.6 m deep (overall dimensions)

DESCRIPTION: The ditch is oriented at approximately 160/340° and can be divided into three sections based on construction methods. The southern portion is a soil ditch (c. 40.5 m long) and is unaltered; the central portion (c. 29 m long and c. 0.4-2.6 m high) consists of a ditch running

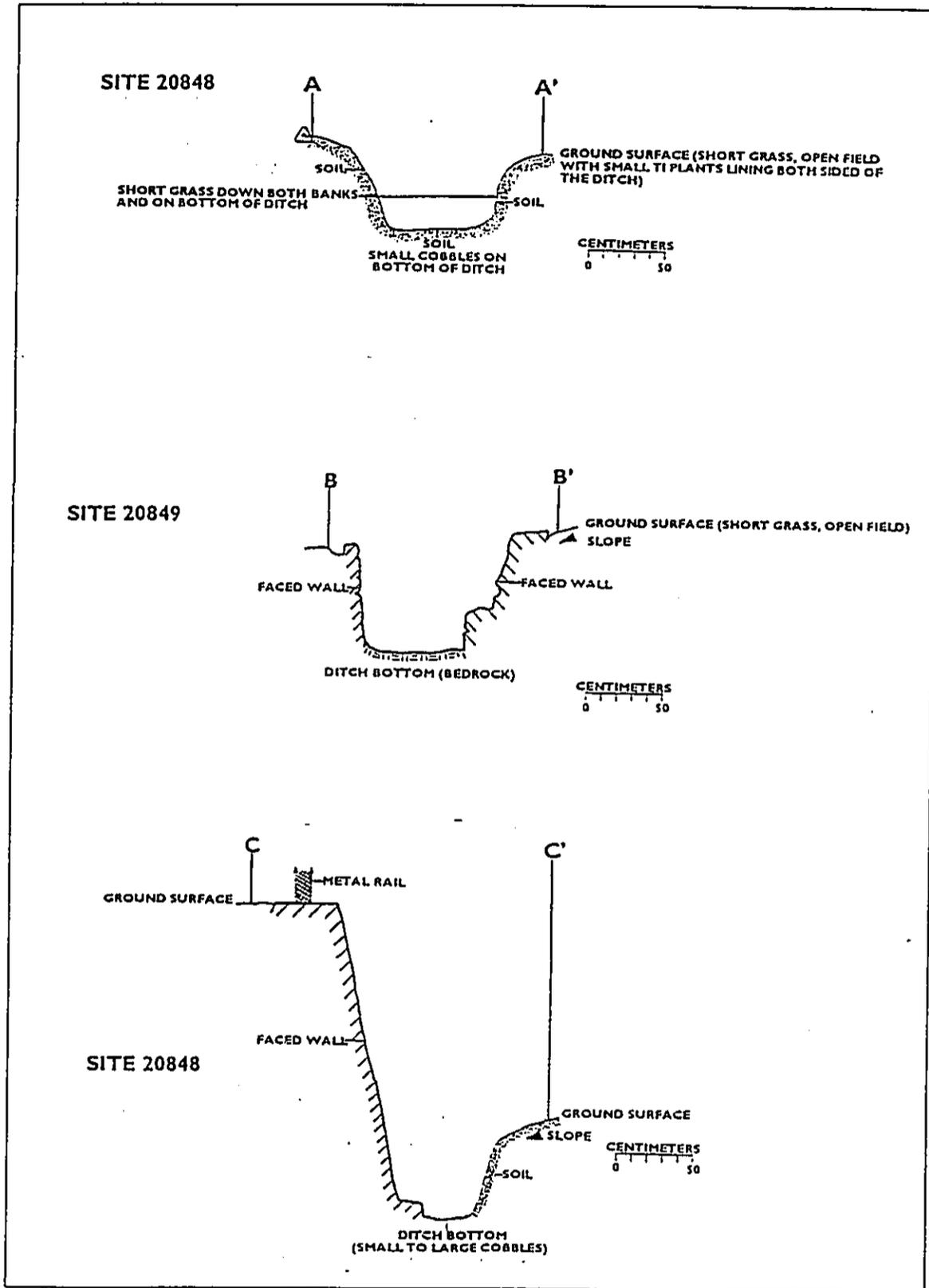


Figure 8. Ditch Profiles (see Figure 7 for profile location)

alongside a recently built boulder terrace with no concrete used in its construction. The terrace was probably built at the same time as the HCCC prison facility, which is immediately to the east. The northern portion of the ditch (c. 18 m) has been modified with stacked boulders with concrete placed between the boulders in places and capping the top of the side walls. The southernmost end of the ditch is fed by two modern storm drains that form a Y-shape that leads into the ditch. At this end the ditch in some places is bordered by *ki*. Site 20848 did not contain water on the day of the survey. Site 20849 (and probably the Hilo Boarding School Ditch, at the base of Halai Hill [see Figure 4]) directed water into this ditch. No evidence suggesting prehistoric use or construction was identified at the site.

STATE NO.: 20849

SITE TYPE: Ditch

TOPOGRAPHY: Gently sloping terrain (to east)

VEGETATION: Ground cover of grass with *ki* bordering ditch. *Kalo* (*Colocasia esculenta* (L.) Schott), *laua 'e* (*Microsorium scolopendria* (Berm.) Copel), ginger (*Zingiberaceae*), Job's tears (*Coix lacryma-jobi* L.), night cestrum (*Cestrum nocturnum* L.), and *Heliconia* (*Heliconia* spp.).

CONDITION: Fair

INTEGRITY: Mostly unaltered; eastern portion altered

PROBABLE AGE: Historic (c. AD 1920s)

FUNCTIONAL INTERPRETATION: Drainage control

DIMENSIONS: 38.3m long by 0.6-0.8 m wide by 0.5-1.15 m deep

DESCRIPTION: The sides of the ditch consist of walls built of well-stacked basalt boulders that have been faced. One-fourth of the way from the east end of the ditch is an area measuring 5.8 m (NW-SE) by 4.2 m (NE-SW) by 1.2-2.5 m deep on the west side. This area contains an old tree stump. The stump measures about 1.4 m long by 1.2 m wide. The entire area between the stump and Site 20848 has been recently modified. The bottom of the east end of the ditch contains concrete. The trench is oriented 45/225° and it did not contain water on the day of the survey. Based on the current survey and on historical records, Site 20849 was built sometime in the AD 1920s. No evidence suggesting prehistoric use or construction was identified at the site. This ditch was probably built to help control water runoff during construction of the Piionua House Lots, 3rd Subdivision, immediately west of Komohana Street.

CONCLUSION

DISCUSSION

The current survey documented two ditches (Sites 20848 and 20849). Site 20848 is probably early historic and was used to transport water for cultivating crops, and providing water to house sites east (downslope) of the present project area. Athens (1982) indicated it was possible that agriculture took place in the area prior to construction of the Hilo Boarding School ditch, in AD 1813. Based on historical records, it appears that Site 20848 was in existence during the late 19th century or early 20th century. The eastern portion of Site 20848 has substantial recent modifications, but it generally still follows its original path. As indicated by previous archaeological and historical documentary research (Athens 1982, Kelly 1982), the current research has confirmed the Hilo Boarding School Ditch is not within the project area.

Site 20849 was built during the AD 1920s and, based on this study and on historical records, was probably used to direct water off of the Piihonua House Lots, 3rd Subdivision, west of Komohana Street. Site 20849 joins Site 20848 within the present study area. Site 20849 appears to be c. 75 years old and has had many recent modifications. Concrete added to the central and the eastern portions has extensively altered the appearance of the original ditch. Like Site 20848, it appears that Site 20849 still generally follows its original route.

The findings of the field work have not significantly deviated from pre-project expectations based on prior archaeological and historic documentary research. It was known that most of the area had been modified during construction of the Hawaii Community Correctional Center. It was assumed several small ditches (or 'auwai) would be present and that they would probably feed house sites and wetland/dryland agricultural fields dating to the prehistoric and/or early historic period. With regard to Site 20848, the pre-project expectations were mostly accurate and it was possible to generally date the site to the late 19th century or early 20th centuries. However, with Site 20849, the degree of concrete modification to the trench was unexpected.

Subsurface excavation within the project area would probably not yield any evidence of prehistoric or early historic agricultural activities because of the substantial modification of the area. However, as stated by Athens (1982), an area across Waianuenue Avenue and east of the old HCCC building, where there is deeper soil deposition, has the potential to contain subsurface deposits (habitation and/or agricultural).

GENERAL SIGNIFICANCE ASSESSMENTS AND RECOMMENDED GENERAL TREATMENTS

Sites 20848 and 20849 have been assessed for significance based on the National Register Criteria for Evaluation, as outlined in the Code of Federal Regulations (36 CFR Part 60). The Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) uses these criteria for evaluating cultural resources. To be assessed as significant a site must possess integrity of location, design, setting, materials, workmanship, feeling, and association and must be characterized by one or more of the following four criteria:

- (A) It must be associated with events that have made a significant contribution to the broad patterns of our history;
- (B) It must be associated with the lives of persons significant in the past;
- (C) It must embody distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value or represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) It must have yielded or may be likely to yield, information important in prehistory or history.

Sites were also assessed for cultural significance using: (a) guidelines prepared by the National Park Service (1990), and (b) guidelines established by the State of Hawaii ("Draft Rules Governing Procedures for Historic Preservation Review" [DLNR 1994]). The Hawaii State guidelines utilize an additional fifth criteria (Criterion E) which defines significant cultural resources as ones that "have an important traditional cultural contribution or value to the native Hawaiian people or to other ethnic groups of the state" (DLNR 1994).

Most archaeological sites are initially evaluated as significant under Criterion D. After the evaluative process of an inventory survey, or the data recovery process of a mitigation program, the research potential of some sites may be exhausted (i.e., after extensive mapping, testing, surface collection, historical research, etc.). In these cases, the sites may maintain their information content value but lose their information content significance. Hence, the sites would be considered as "No Longer Significant" (NLS).

Based on the federal and state criteria described above, Sites 20848 and 20849 are assessed as significant for information content (*Criterion D, Table 2*). However, this information has been collected during the current study, making the sites "No Longer Significant." No further work is required for the sites, and their preservation is not required. Because of the substantial modification of the project area, excavations are unlikely to produce significant information. While further historical documentary research of records at the State Survey Branch and Bureau of Conveyances, in Honolulu, as well as oral historical research, might add to the information presented in this study, it is not likely that the information would result in a change of the overall conclusions of this study.

Table 2. Summary of General Significance Assessments and Recommended General Treatments

PHRI Site No.	Site Type	Significance Evaluations					NLS	General Recommendations			
		A	B	C	D	E		FDC	NFW	PID	PAI
20848	Ditch	-	-	-	-	-	+	-	+	-	-
20849	Ditch	-	-	-	-	-	+	-	+	-	-
Total:		0	0	0	0	0	2	0	2	0	0

General Significance Categories:

- A = Associated with events that have made a significant contribution to the broad patterns of history
- B = Associated with the lives of persons significant in our past
- C = Excellent example of site type at local, regional, island, state, or national level (PHRI=interpretive value);
- D = Important for information content, further data collection necessary (PHRI=research value);
- E = Culturally significant (PHRI=cultural value);
- NLS = Important for information content, no further data collection necessary (PHRI=research value, DLNR-SHPD = not significant).

Recommended General Treatments:

- FDC = Further data collection necessary (detailed recording, surface collections, and limited excavations, and possibly subsequent data recovery/mitigation excavations);
- NFW = No further work of any kind necessary, sufficient data collected archaeological clearance recommended, no preservation potential;
- PID = Preservation with some level of interpretive development recommended (including appropriate related data recovery work);
- PAI = Preservation "as is," with no further work (and possible inclusion into land scaping), or possibly, minimal further data collection necessary.

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