DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

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December 22, 2000

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
Department of Health
235 S. Beretania Street, #702
Honolulu, HI 96813

'00 DEC 26 A11:36
OFC. OF ENVIRONMENTAL QUALITY CONTROL

Dear Ms. Salmonson:

Subject: West Side Resource Center
TMK 4-6-15:por. 01

In accordance with the provisions of the Chapter 343, Hawaii Revised Statutes and Title 11, Chapter 200 of the Administrative Rules of the State Department of Health and the National Environmental Policy Act of 1969, a Final Environmental Assessment (EA) has been prepared for the proposed project.

As the approving agency, the County of Maui, Department of Housing and Human Concerns believes that there will be no significant impacts as a result of the proposed action and is filing a Finding of No Significant Impact (FONSI).

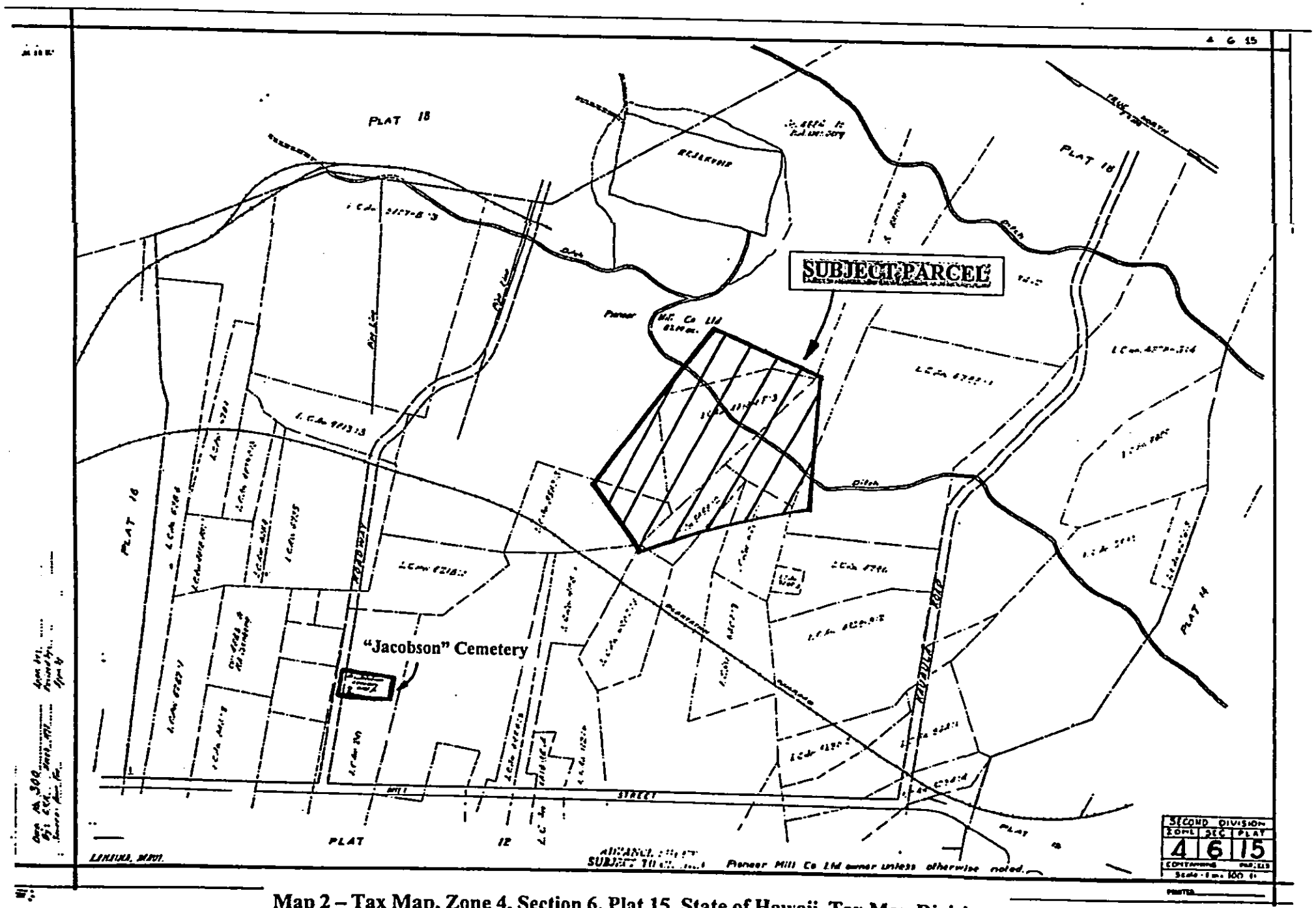
Enclosed are one (1) copy of the QEQC Publication form and four (4) copies of the Final EA. In addition, please be advised that the Project Summary has not changed since the publication of the Draft EA. We respectfully request that notice of the availability of the Final EA be published in the next edition of the Environmental Notice.

Very truly yours,

ALICE L. LEE
Director of Housing
and Human Concerns

AL:cc

xc: Charles Ridings, Ka Hale A Ke Ola
Glenn Tadaki, Munekiyo, Arakawa & Hiraga, Inc.



Map 2 – Tax Map, Zone 4, Section 6, Plat 15, State of Hawaii, Tax Map Division.

INTRODUCTION

In reviewing the guidelines for assessing cultural impacts, adopted by the Environmental Council of Hawaii in 1997, they state that a cultural impact assessment should include information relating to the practices and beliefs of a particular cultural or ethnic group. The cultural group of concern here is that of Native Hawaiians.

The project lies within the traditional district (moku) of Lahaina, and more specifically within the ahupua`a of Ko`oka, Waine`e, and Pua`anui. It is part of an area of Maui which has a strong spiritual connection to the *mo`o*, Kahiwahine. The center of this influence was Moku`ula--an island built over a grotto in which she dwelt. The royal families of Maui, and later on the Kamehameha's of Hawaii, associated with this spiritual being, and thus considered Moku`ula the center of their world. The figure below is a model of the sociopolitical landscape of Lahaina (Klieger, 1998, p. 70). It shows the sovereign, surrounded by governmental officials, then ranking chiefs (*konohiki*) and relatives, and finally *haole* and *maka`ainana.*

What follows is 1) a brief history of Lahaina, emphasizing the land use patterns in the project area, and in the overall region; 2) oral histories; and 3) an evaluation and assessment of potential cultural impacts.

Historical Background Research

A part of the survey area lies within the boundary of the present Lahaina National Historic Landmark District, and was no doubt associated with the former political and social center indicated by this recognition. In precontact times, Lahaina served as the residence of powerful chiefs—the most notable of whom was Kahekili. The Lahaina District was considered by high chiefs to be a desirable location because of its abundant resources and climate, as well as its proximity to the islands of Lana`i and Moloka`i.

Precontact to mid-1800s

Early historic references to Lahaina District describe a rich agricultural oasis, with *taro*, breadfruit, coconut, and other food crops growing near the coast. *Taro* pondfields were interspersed with fish ponds—all being watered from streams coming down from the mountains. Handy and Handy, (1972, p. 493) refer to the area as extending "about

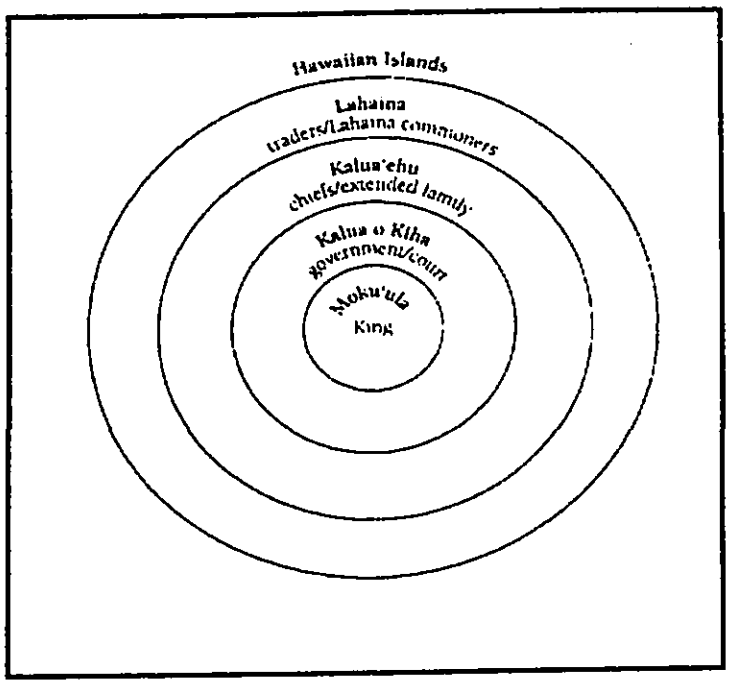


Figure 1 – Sociopolitical landscape of Lahaina under Kamehameha III.
(from Klieger, 1998, p. 70)

three leagues[1] in length and one in its greatest breadth. Beyond this all is dry and barren".

The name—Lahaina—is said to refer to the "cruel sun"—which is probably a reference to the droughts that effected the surrounding area from time to time (Pukui et al., 1974, p. 127). In precontact times, Lahaina itself was a garden-like area, with *lo`i*, ditches (*`auwai)* and separating embankments creating a verdant landscape. Brackish-water and fresh water ponds (*loko*), were also present. The largest and most significant of these being Loko o Mokuhinia,[2] which lies about 0.5 kilometer to the west (ma*k*ai) of the present project area. Given the limited rainfall on the leeward side of the island, the garden-like quality of Lahaina was a testament to the skill and ingenuity of Native Hawaiians farmers. Ocean resources were also abundant and harvested.

Early visitors commented on the appearance of Lahaina. Archibald Menzies, a naturalist and surgeon on the Captain George Vancouver's vessel, HMS Discovery, reported during the 1793 voyage (Handy and Handy, 1972, p. 493):

"March 17. On the forenoon of the 17th, I accompanied Captain Vancouver and a party of officers, with two Niihau women to see the village of Lahaina, which we found scattered along shore on a low tract of land that was neatly divided into little fields and

[1] One league is about equal to 3 miles.
[2] See Appendix A for more on the significance of this lake.

laid out in the highest state of cultivation and improvement by being planted in the most regulated manner with different esculent roots and useful vegetables of the country, and watered at pleasure by aqueducts that ran here and there along the banks intersecting the fields, and in this manner branching through the greatest part of the plantation."

When Louis de Freycinet visited Lahaina in 1819, J. Arago also commented on the idyllic appearance of Lahaina (Ibid.):

"The environs of Lahaina are like a garden. It would be difficult to find a soil more fertile, or a people who can turn it to greater advantage; little pathways sufficiently raised, and kept in excellent condition, serve as communications between the different estates. These are frequently divided by trenches, through which a fresh and limpid stream flows tranquilly, giving life to the plantations, the sole riches of the country."

Lahaina's main *taro* lands, were watered by 2 large streams, Kanaha and Kahoma, which ran back into deep steep-sided valleys, the sides of which were "too precipitous for terracing" (Ibid., p. 492).

At the end of the 18th century, Kamehameha I had nearly accomplished the conquest of the Hawaiian Islands. After defeating Maui ruler Kahekili at the battle of Kepaniwai in Iao Valley in 1790, he invaded and took over the leeward side of the island in 1795. Kamakau (1992) described Kamehameha's fleet of war canoes as stretching from Laniupoko on the south, to Mala on the north. Finding Lahaina the ideal place to rest and rejuvenate while preparing for the invasion of Oahu, he set up the first capital of the Hawaii. With the aid of two foreigners, he commissioned the construction of a "Brick Palace" from which to administer and collect taxes. Lahaina was to remain the capital until the middle of the 19th century, when the center of government was permanently moved to Honolulu.[3]

Foreign influence became more and more pervasive following the unification under Kahemameha I. These forces brought commercial, social and religious changes to Lahaina, as well as to the other islands. Lahania was attractive to foreign ships because of the favorable anchoring conditions found in the Lahaina Roads. The first whaling ships anchored off Lahaina in 1819, and the provisioning of these ships soon became a lucrative new venture. Following, a few years later, missionaries from New England were added to the mix, and the wheels of acculturation began to turn even more quickly. A missionary census in 1862 recorded the population of Lahaina at just over 4,000.

The Mahele

In 1848, during the reign of Kamehameha III, the traditional Hawaiian land ownership pattern was replaced with a more Western-style system. The Mahele, or division, separated lands into 3 major divisions— Crown lands (lands for the king), Government Lands, and Konohiki Lands. If common people, referred to as Native

[3] See Appendix A for more on the Kamehamehas in Lahaina.

tenants, had lived on and gained subsistence from a parcel of land, they could claim these lands, which came to be known as *kuleana*.

Land Commission Awards on study parcel

A total of 35 Land Commission Awards are shown on the Tax Map (4-6-15) on which the study area is located. There was no data available for 5 of the numbered LCAs. There are portions of 5 LCAs located on the subject property, which are indicated by an "x" on the following table (Table 1). There are also portions of 2 Land Grants—4686—to H. A. Isenberg, a former manager of Pioneer Mill in the late 1800s, and Grant 725, *Apana* 2 and 3 to Namauu on the subject parcel. Namauu was the *konohiki* of lands in Ko`oka, and gave taro and *kula* lands to his people, prior to the Mahele. Four of the awards which occur on the study parcel have been documented as to land use, using the Waihono `aina database.

Information on land usage on these 4 properties follows:

No. 5458, Manu. Apana: 3. Loi: 27. Kula: 14. 1.5 acres, 10 rods. Kooka, Lahaina.
N.R. 296-297v6
Greetings to the Land Commissioners: I have some lo`is and some mo`o kulas which were given by Namauu, my konohiki, at the time when Kaenaena was the Tax Official for Lahaina.

There are a total of 27 lo`i, they are not large ones but are small.

Furthermore, there are a total of 14 mo`o kula. These mo`os are not long, they are short.

The boundaries of these lo`is and the mo`o kulas are understood by us.

Also, the explanation of the giving of this land to me by Namauu, if this is not clear to you, you can see in the letter claiming land by Namauu.
MANU
Lahaina, Maui, 28 January 1848
F.T. 45-46v7
Luaana, sworn, I know the land of the claimant consists of a piece of kula and 5 lois lying together and 17 lois comprising a section of kalo land mauka. They are all in "Kooka" Lahaina. The claimant received these lands in the days of Hoapili in the early days (of that great man) and he has been in undisputed possession ever since.

Cl. 6205, Olelo. Apana: 2. Loi 6. Kula 3. Houselot 1. Pali: yes. 1.25 acres 26 rods. Kooka Lahaina.
F.T. 102v7
Lazaro Namauu, sworn, I know the lands of the claimant. They are in "Kooka" Lahaina. They consist of 3 kula and 6 lois in one piece and one house lot. The claimant received them from me in the year 1842 and his title has never been disputed.

Claim: 4878-EE to Makaiole, wahine. Apana: 6. Loi: 6. Kula: 5 and Houselot: 1. Puaa, Waianae, Wainee, Lahaina.
F.T. 167-168v7
Manae Wahine, sworn, I know the lands of the claimant in Puaanui, Lahaina. They consist of 6 pieces; one Pahale, two pieces of kula, 5 mo`os of kula, separated in two pieces, once piece of 1 mo`o, and the other 4 mo`os, and the other two in Waineenui, one piece of 5 lois, and the other piece of one loi and kula.

The claimant received the first six pieces from Kakelihi in 1851 and the two pieces in Waineenui in 1831 and her title has never been disputed up to the present time, except for the 5th piece. which was disputed, and taken away by Kahue in 1848, at the first she had 5 mo'os in this piece. but in 1838 she gave it to the King, and in 1848 Kalua, the konohiki, took away the 4 remaining.

Claim: 8587 to Kaupena. Apana: 3. Loi: 2. Kula: 1. Houselot: 1. Puaanui Lahaina. 1.5 acres 10 rods. Koele/Poalima: yes. Stream/Muliwai/River: yes. Pali: yes.
N.R. 470v6 March 5, 1848
Hear ye, Land commissioners of the Government: I hereby state my claim to you which was given by the konohiki. There are one taro mo'o and a house lot. They are at Puaa. Kuakamauna gave his consent. That is my claim.
Respectfully,
KAUPENA

F.T. 174-175v7
Waikele wahine, sworn, I know the land of the claimant. They are in Puaanui, Lahaina. Four pieces.
No. 1 Houselot and kula
No. 2 A section of kalo land
No. 3 of one loi
No. 4 of one loi.

The claimant received these lands from Kauheauanui, the konohiki of Puaanui in 1845, and he has possessed them in peace ever since.

There are portions of 4 LCAs on the study property, as well as portions of two land grants. Two pieces of Grant 725 to Namauu, also run through the property, as well as a section of Grant 4684 to H. A. Isenberg along the *mauka* side of the parcel (See Map 3). Land Commission Awards 5458, and 6205 lie on either side of the Namauu grant, and are based on land given to the awardees by him. Both were taro lands, as was LCA 8587, adjacent to LCA 5458. The *apana* (LCA 4878-EE: 3) to the north was awarded as pasturage. This area must have had a constant supply of water available prior to the establishment of plantation agriculture, in order to grow *taro*. Today, it is quite dry, and would not be suitable for such usage.

Plantation Era

Sugarcane cultivation began in West Maui in 1849 when Judge A.W. Parsons established and began operating a sugar mill in Lahaina. It was sold to J.T. Gower about 1850, and in 1852, was sold at auction to O.H. Gulick, along with 1,000 acres of land (HRHP, 1974).

TABLE 1

Selected Land Commission Awards in TMK 4-6-15

LCA	Apana	R.P. #	Awardee	Size of award	Location	Land Use
241		410	Sol D. Burrows	0.81 acres	Wainee	
496	1	2759	Popolo	1 acre 2 rods	Puaanui	

		3340				
5207-B	3		Ulumaheihei		Wainee	Kula lands
5458 x	2	1699	Manu	1.5 acres 20 rods	Kooka	Kula and 5 lois
5832			Kaaumaiewa		Kamani	
6205 x	1	2723	Olelo	1.25 ac. 25 rods	Kooka	Taro lands – 6 *loi*, 3 *kula*
6207	3	2724	Kahaka	2 roods 23 rods	Kooka	Taro lands?
6218	1		Wahine Manae	1.46 acres	Waineenui	
6507	3		Apaa		Kooka	Taro land, kula, houselot
6785			Kaluahinenui	2 acres, 12 rods	Wainee	
6786			Kamohonoho	2.52 acres	Wainee	
6787	1		Hanoumua	1.75 acres	Waineenui	
6794	2	5645	Koalakai		Polanui	
6795	1	No RP	Ukukua	4 acres 2 roods	Polanui	
6796		2728	Kui	1.25 acres	Polanui	Taro land
8587 x	3	5580	Kaupena	1.5 acres 10 rods	Puaanui	Taro lands – 1 *loi*
4878-EE x	3, 4	2737	Wahine Makaiole	2 acres 2 roods 9 rods	Wainee	Apana 3 – *kula* pasture Apana 4 – *kula* pasture

In 1854, a whaling vessel stopped in Lahaina on a return voyage from Tahiti, carrying 2 varieties of sugar cane common in Tahiti. These were given to the U.S. Consul in Lahaina, who planted them in his garden. One variety proved to be hardy and productive in the harsh Lahaina climate, becoming known as "Lahaina" cane. It was the predominant variety for the next 50 years (HRHP, 1974).

In 1859, Henry Dickinson, a Lahaina shop keeper. formed the Lahaina Sugar Company, and a year or so later, Pioneer Mill Company was founded by three partners--James Campbell, Henry Turton, and James Dunbar, on land deeded to them by Benjamin Pittman. In 1863, Lahaina Sugar Company was sold to Pioneer Mill Company after going bankrupt. A third plantation was attempted by Lot Kamehameha and partners in 1870, but was also bought out by Pioneer Mill Company a couple of years later. In 1877, a German ex-ship captain, H. Hackfield, took over as manager of the plantation that represented assets of $500,000 by 1883 (Simpich, 1974, as cited in Graves, 1993, p. A-5).

Henry Turton, one of the originators of Pioneer Mill Company plantation, received permission from the Minister of the Interior of the Kingdom of Hawaii in May of 1882, to proceed with building of a railroad system. Intended to connect distant fields with the mill, it eventually extended north to Napili, and south to Ukumehame.

In the heyday of sugar production, Pioneer Mill provided electricity, water, and medical care to not only its workers, but to the town of Lahaina. It ran the largest mercantile on Front Street, Lahaina Dry Goods. The building was said to have been built as a possible refuge for the Kaiser, prior to World War I. Because of the fact that it was controlled by German nationals in 1917, H. Hackfield and Company, the managing agent for Pioneer Mill, was seized by the government and sold to Americans as America entered World War I. Quickly, the company was renamed American Factors, and later became known as Amfac, Inc.

In the early part of the 20th century. Pioneer Mill controlled c. 12,500 acres of land on the west side of Maui—lands which were considered some of the rockiest of the plantation lands in Hawaii. This rockiness is commented upon in Gilmore's The Hawaii Sugar Manual:

"Owing to the roughness of the terrain, very little cultivating is ever effected with implements drawn by either tractors or mules. Practically all is done with the hoe. Forty percent of the land is so completely covered with rocks that plowing is impossible, and preparing land for planting is done with pick and shovel.

In these fields the rocks are cleared away and built into a series of stone walls from 5 to 6 feet apart and often 3 feet high. These stone walls form the banks of the cane row; and between these walls the ground is softened up with pick and then planted. The soil in these areas, although extremely difficult to get at, is very fertile and yields as great as from 90 to 100 tons per acre can be secured off such fields (1936: 200, in Haun, 1999, p. 15).

Obviously, such work was extremely labor-intensive, and a constant flow of immigrants was needed for the workforce. The first group to come were the Chinese in the early sugar plantation years, followed a generation later by the Japanese, and finally in the 1920s and 1930s, by the Filipinos.

The plantation was basically a feudal system, which provided for all of the workers needs—from housing, to merchandise, to health care and social activity. In this environment, Waine'e Village was established in the early 1900s. The village contained up to 200 houses in its prime in the 1920s. It continued to house plantation employees throughout the pre- and post-World War II years, until it was slated for destruction. In March, 1999, it was announced that Pioneer Mill would cease to plant sugarcane on its vast land holding on the west side of Maui. As each field ripened, it would be harvested, and when all harvest was complete, the mill would be closed down.

The Maui News devoted several pages to the history of Pioneer Mill in its August 29, 1999 issue. At that time, there were 36 homes left standing in Waine'e Village, which made up what was described as the last plantation camp on Maui. The article went on to state that "Until recently, nearly all of the homes were occupied, although...the structures, many of them built in the 1920s, were in poor condition".

Oral Histories

In August of 1999, Munekiyo, Arakawa & Hiraga prepared a draft of the History of Camp Structure and Living Conditions of Wainee Village for AMFAC, Inc. The State Historic Preservation Division, in its review of the proposed demolition of structures within Wainee Village, noted the following "We recommend that a history of the camp structure and living conditions somehow be recorded, to provide a 'picture' of plantation in the village. We understand that this may be one of the last remaining 'camps' on the island. The information would be a mitigation for the 'adverse effect' resulting from the demolition of the remaining structures of the camp." (p. i)

A synopsis of the oral history interviews, conducted by Mr. Gaylord Kubota, have been included in this report to establish the "flavor of the camp" prior to demolition, and provide information on camp activities.

Most of the informants were of Japanese ancestry, and spoke about life in the village prior to World War II. They lived in what was known as the "upper part" of the camp. Theirs was a close-knit community, where everyone looked out for their neighbors. There was no indoor plumbing—folks used a wooded outhouse. Bathing was done in a "furo" behind the house—the water being heated by a wood fire in the winter, and the sun in the summer. Laundry was also done outside, and dried on a clothes line. While electricity came into the camp in the 1930s, most people could not afford appliances such a refrigerators and washing machines. Cooking was done on wood or kerosene stoves. Outdoor wood burning ovens, or "kudos" were another feature reflecting Japanese tradition. There was also a community bathhouse.

Children played baseball and basketball in recreation areas, and swam in the irrigation ditch ("lua") that ran through camp. There were few formal toys to play with. Empty Bull Duram tobacco bags became bean bags, strings and tin can became telephones. Bamboo pieces became fishing poles. Youngsters also made canoes out of roofing materials, which they paddled in the ("lua"). They fished for tilapia and carp in, and shot birds in the fig trees with homemade slingshots around the "makalua" (upper reservior).

There was a clubhouse where movies, sponsored by Coca-Cola, were shown, and later on chicken fights were staged on the grounds. The children went to Kamehameha III elementary school, and Lahainaluna High School.

Nearly all families grew vegetables and raised chickens. Fruit trees, such as mango, guava, pomegranate, lemon, starfruit, fig trees, and sour sop were grown. Banana groves were also common, and the fruits were shared when supplies were abundant. One informant talked about expeditions into the high valley to a special cave where honey was collected.

One Hawaiian gentleman maintained a *taro* patch in the village.[4]

World War II significantly effected the camp. Some families were interned by the government. Blackouts were common, and dark paper covered the windows. Food was rationed, as was gasoline.

During and after the war, more Filipinos came to live in Waine'e Village. They moved into the "lower camp". The husband of one Filipino family was a block warden, who was responsible for several homes in camp. If residents had problems, they went to see him, and his house had a "Block Warden" sign on it. The Japanese and Filipino

[4] This appears to be a carry over of land usage for *taro* production in early historic times, as indicated by the number of *kuleana* for this purpose.

families kept to themselves for the most part. There were many single Filipino males who stayed at the single men's quarters. This had a community kitchen. Some women cleaned and cooked and did the laundry for them, in order to earn extra money. The Filipino families also raised pigs, and sometimes *taro*, both of which were sold to add to the household income. While there was a general geographical division in the camp, between lower and upper camp, people got along for the most part, and the informants did not remember hostility between ethnic groups. All mention that although the camp had dirt streets, and what looked to the outsider as run down houses, none felt a poverty of spirit in the community. Rather, they talked nostalgically about past times, and how people took care of each other, how doors were never locked, and how things had changed.

Additional oral histories

In December 2000, Erik Fredericksen interviewed the following individuals, some of whom lived in Waine'e Village themselves, and had general knowledge of traditional Hawaiian culture and customs.

Mr. Sonny Waiohu (former Waine'e Village resident and Pioneer Mill retiree)

Mr. Sonny Waiohu was contacted by phone on 12 December 2000. Mr. Waiohu related that he was an employee of Pioneer Mill from about 1957 until its closure in 1999. He moved to Waine'e Village around 1950 after a "Kaua'ula Wind" destroyed the house that his family formerly lived in. Mr. Waiohu remained a resident of the camp until 1999, when it was closed and demolished. He was one of a group of camp residents that attempted to get Waine'e Village preserved for its historical significance.[5] However, this movement was unsuccessful, and the camp was demolished in late 1999.

Mr. Waiohu noted that much of Waine'e Village was on sugarcane land.[6] He believes that the former camp was built in the early 1900s and was expanded through the first half of the century. He noted that this general area has undergone a lot of plantation-related ground disturbance. Mr. Waiohu mentioned that "B" Pump was located at the *makai* (west) side of the old camp. This pump station was supplied water from a large reservoir *mauka* (northeast) of the proposed West Side Resource Center. He also noted that many underground concrete ditches were present in the old camp area. In addition, he mentioned a small cemetery that lies to the southwest (*makai*) of the former camp along the old cane haul road.[7]

Mr. Waiohu did not recall that the camp area was used for any traditional gathering purposes during his residence there. He does not recall anyone ever locating

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[5] This group of residents also at one time hoped to purchase their respective plantation camp homes and continue to reside in the village.

[6] At the time of the archaeological inventory survey, we estimate that c. 2 acres of the c. 5 acre project area consisted of abandoned sugarcane field.

[7] This small cemetery (shown as Jacobson Cemetery on Map 2) was also noted by Ms. Katie Nahina and Mr. William Waiohu.

any Hawaiian artifacts within the overall plantation camp during his nearly 50 year residence there. Mr. Waiohu was generally supportive of the West Side Resource Center project, although he did express sadness at the demolition of Waine'e Village and the loss of the plantation community lifestyle.

Mr. William Waiohu (former Waine'e Village resident and Pioneer Mill employee)

Mr. William Waiohu, Maui/Lana'i Islands Burial Council, was questioned by phone and face-to-face interview between 12 and 18 December 2000.[8] Mr. Waiohu, the younger brother of Mr. Sonny Waiohu, was born in Ukumehame and later moved with the Waiohu family to Waine'e Village in about 1951.[9] He began working for Pioneer Mill in 1962, and took medical retirement in 1975. He lived in the camp until about 1971.

Mr. Waiohu, like his brother, Sonny, also noted that the camp area had been previously impacted by sugar cane production. He mentioned that he and his family had lived near "B" pump. This pump station collects water from a large reservoir *mauka* (northeast) of the proposed West Side Resource Center Project, via large concrete pipes.[10]

Mr. William Waiohu, Maui/Lana'i Islands Burial Council member, former Waine'e Village resident, and Pioneer Mill employee, was questioned by phone and by face-to-face interview.

Mr. Waiohu did not feel that traditional practices take place on the project area any longer. However, he did feel that *taro lo'i* were once present in the area, "before the plantation took the water away." He also mentioned the relative close proximity of "B" pump, and noted that the area had been heavily disturbed by the plantation. Mr. Wai'ohu feels that the *mauka* valleys and rivers are now the important traditional areas, in addition to Lahaina Town *makai*, or to the southwest.[11] Mr. Waiohu did not feel that the project would impact traditional cultural practices in the former Waine'e Village, because "it is all gone now". He hopes that affordable housing for Hawaiians will one day be built in the general area of the former Waine'e Village.

Ms. Katie Nahina, *kupuna*, lineal and cultural descendent of Olowalu, former resident of Waine'e Village.

Ms. Nahina was born in Olowalu Valley, but has lived in Lahaina for much of her life. Ms. Nahina lived in Waine'e Village when she was a girl, and she is a long-time resident of Lahaina and knows other people that lived in the former plantation camp. She also mentioned the small graveyard that lies to the southwest of the proposed West Side

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[8] Mr. William Waiohu is the younger brother of Mr. Sonny Waiohu.

[9] The family moved to the Village after a "Kaua'ula Wind" destroyed their home in the Lahaina area.

[10] It is estimated that this pump station lies within 200 meters (c. 650 feet) of the proposed West Side Resource Center. Xamanek Researches located a large concrete pipe during inventory level testing on the project parcel. This pipe is likely associated with this near-by pump house.

[11] He stressed the importance of Moku'ula, Kaua'ula Stream, and Kaua'ula Valley.

Resource Center. Ms. Nahina expressed concern over the status of this cemetery, and its current ownership.[12]

Ms. Nahina felt that the development of the West Side Resource Center on its 5-acre parcel would not impact traditional cultural practices in the former Waine`e Village. She expressed sadness that Waine`e Village had been torn down. She also expressed hope that affordable housing would be developed for Hawaiians in West Maui in the near future.

Ms. Patricia Nishiyama, Na Kupuna o Maui

Ms. Nishiyama, a long-time Lahaina resident. was interviewed after the November 2000 meeting of the Maui/Lana`i Islands Burial Council. While Ms. Nishiyama was sad to see Waine`e Village demolished. she was supportive of the West Side Resource Center Project. and felt that there would be no impact on traditional Hawaiian practices. She. too. expressed the hope that affordable housing would be constructed for Native Hawaiians in the near future in Lahaina.

Mr. Ku`ulei Palakiko, Kaua`ula Valley resident.

Mr. Ku`ulei Palakiko was contacted by telephone. He was present at a public information meeting held in Lahaina in November 2000. concerning the West Side Resource Center Project. Mr. Palakiko is a resident of Kaua`ula Valley which lies about ¾ of a mile to the southeast of the Center.

Mr. Palakiko expressed his concern over the general level of development on former Pioneer Mill land, particularly in Kaua`ula *ahupua`a.* However, he did give his support for the Resource Center project, again concurring that this particular project would not impact Hawaiian practices in a negative way. He felt that the 5-acre project would be positive for the Lahaina area.

[12] This cemetery lies well-off of the project area. and is noted for informational purposes only.

SUMMARY

The region in which the project area is located is *mauka* of the sacred central Moku`ula, and on the periphery of Lahaina. Traditional Hawaiian cultural land usage was for *taro* production primarily, as indicated by the numerous *kuleana* awarded in the general vicinity of the proposed West Side Resource Center Project. Water was carried by *`auwae* from Kaua`ula and Kanaha Valleys to Lahaina, and provided the necessary essential ingredient to create the verdant oasis referred to by early visitors. In the early 19th century, many people were drawn to Lahaina, as it became the governmental center under Kamehameha III. The arrival of missionaries brought foreign religion; whaling ships brought foreign trade. Lahaina became a commercial center as well as a being the capital of the kingdom. All of the newcomers had to be fed, and quite possibly some of the *taro* produced in the *lo`i* of the project area found its way to these ready markets.

The project locale does not lie in an area through which the *mauka-makai* trail system passed. Rather, it lies on the fringe dominated by *taro lo`i* and *mo`o kula,* according to native testimony documented during the Mahele.

Almost at the same time as the Mahele was taking place, in which traditional Hawaiian lands were being divided, commercial cultivation of sugar cane began, and became a force that consolidated land rights once more—this time in the hands of sugar planters. By 1850, 1000 acres of Lahaina land was under cultivation. An immense amount of water was needed to produce sugarcane in this arid climate, and the production of taro gradually became impossible. Eventually, the taro lands were converted in to sugarcane fields, which were plowed and cultivated for decades. Around 1900, Waine`e Village construction further impacted any remnants of the former *taro lo`i* system that may have survived sugarcane cultivation activity. According to testimony collected by Mr. Gaylord Kubota, one Hawaiian family maintained a *taro* patch somewhere in Waine`e Village well into the 20th century. However, information obtained from the archaeological inventory survey conducted in 2000 on the 5-acre site of the Resource Center, did not reveal any evidence of such activity (Fredericksen and Fredericksen, 2000).

Historical background information collected for the archaeological inventory survey indicates that adverse cultural impact occurred long ago, when the plantation began cultivation of sugarcane. Those interviewed for this cultural impact assessment study agreed that plantation agriculture had significantly altered the cultural landscape. None of the informants felt that the proposed West Side Resource Center project would produce additional negative impacts on the traditional Hawaiian cultural landscape that was once present in this area of Maui.

References

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Pukui, Mary K. and Samuel H. Elbert and Esther T. Mookini
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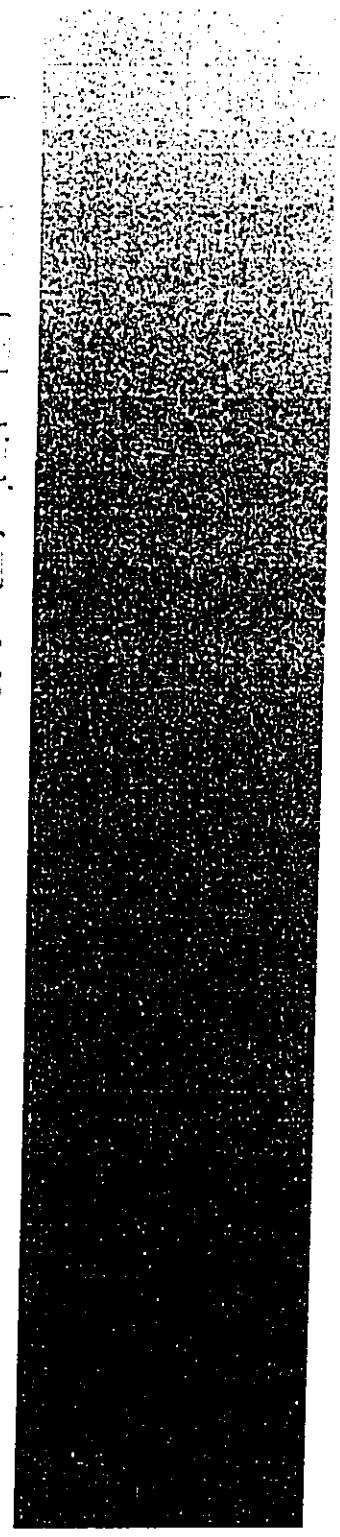
Appendix D

Preliminary Engineering Report

Established 1969



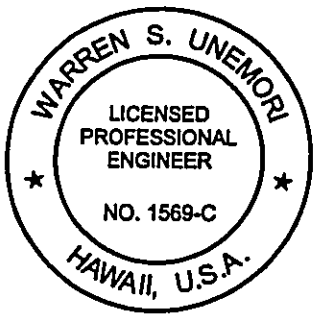
Preliminary Engineering Report

WESTSIDE RESOURCE CENTER

Lahaina, Maui, Hawaii
TMK: (2) 4-6-15: Portion 1

Prepared For:

Ka Hale A Ke Ola
Wailuku, Maui, Hawaii



Warren S. Unemori Engineering, Inc.
Civil and Structural Engineers - Land Surveyors
2145 Wells Street, Suite 403
Wailuku, Hawaii 96793

Date: October, 2000

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Preliminary Engineering Report
for
The Westside Resource Center

1.0 INTRODUCTION

The five (5) acre Westside Resource Center (WSRC) site is located in Lahaina, above Honoapiilani Highway and the Lahaina Recreational Center. The WSRC site will be situated on land that was previously occupied by Wainee Village. All remnants of the village have been removed except for some trees. Ka Hale A Ke Ola (KHAKO) is planning to build transitional and affordable housing units, a child care and resource center including support facilities on the site.

This report briefly describes and evaluates the available infrastructure in the vicinity of the project. It also summarizes probable infrastructural improvements that may be needed to support the proposed project.

2.0 EXISTING INFRASTRUCTURE

2.1 Water System

The source of water for Lahaina are four (4) deepwells located above Alaeloa and referred to as Napili Wells 1, 2, and 3 and Honokohau Well A. These wells are supplemented by a water treatment plant at Mahinahina above Honokowai that draws surface water from the Honolua Ditch. Several miles of 12 and 16 inch lines and two in-line booster stations convey water from these sources to consumers in Lahaina.

Storage is provided by a 1.5 storage tank above Wahikuli and also a 1.0 MG tank on Lahainaluna Road.

There is an 8 inch line on Shaw Street. This line connects to a 12 inch line on Mill Street that loops back to an 8 inch line on the west side of Honoapiilani Highway.

2.2 Sewer System

The nearest sewer manhole for the County sewer system is located on Shaw Street approximately 700 feet west of Mill Street. According to plans on file at the County's Wastewater Division this is an 8-inch diameter sewer line.

The Lahaina Wastewater Reclamation Facility, northeast of Kaanapali Resort, has a total capacity of 9.0 MGD. This facility was upsized from 6.7 MGD to 9.0 MGD in March of 1995. Therefore it has excess capacity to receive and process the projected flow from the WSRC site.

2.3 Drainage

The United States Department of Agriculture through their lead agency the Soil Conservation Service (SCS) (now called the Natural Resource Conservation Service (NRCS)), has developed a flood protection plan for the Lahaina watershed area located between Lahainaluna Road and Puumana. According to the staff of the Maui Branch of NRCS, construction of the planned improvements are subject to availability of funding at the

Federal and County levels of government. However in the interim they have constructed an earthen diversion ditch between the WSRC project site and Kauaula Stream. They also installed a retention basin above Mill Street near Dickenson Street.

For reasons stated above and since the developer plans to proceed with the WSRC project before the NRCS flood protection plan is fully implemented the improvements described hereafter will be an interim plan developed in accordance with Title MC-15, "Rules for the Design of Storm Drainage Facilities in the County of Maui".

The proposed WSRC project site is situated within the Lahaina watershed area. (See Figure 1.)

The contributory drainage area above the WSRC project site contains two former irrigation reservoirs, the first located about 200 feet mauka of the project site on Amfac land and the second situated approximately 2200 feet upstream of the project site on Bishop Estate land. (See Figure 2.) This area was previously used for sugar cane cultivation, therefore it is bisected by several dry north/south irrigation ditches, although the land is now fallow due to the closing of Pioneer Mill Company.

The total peak runoff from this offsite area for a 100 year 24 hour storm in its present fallow condition is estimated to be 334 cfs. According to NRCS their interim plan calls for runoff from above the WSRC site being

directed into the existing reservoir. A spillway was installed at the southwest corner of this reservoir to handle overflows and direct water into the diversion ditch mentioned above.

According to the Flood Insurance Rate Map (FIRM) for the County of Maui, specifically panel 150003 0163C, the project site is within Zone "C", where only minimal flooding is likely to occur. (See Figure 3.)

Runoff from the 5.0 acre project site in its current pre-development condition for a 50 year-1 hour storm is estimated to be around 7.6 cfs.

2.4 Roadway

Access to the project site from Honoapiilani Highway will be by way of Shaw Street. The intersection of Honoapiilani Highway and Shaw Street is signalized with appropriate turn lanes. Shaw Street is a two lane roadway which is paved up to Mill Street. A 60 feet wide roadway easement has been provided to provide access to the project site above Mill Street.

2.5 Electricity, Telephone and CATV

Power is available on Shaw Street up to the Lahaina Aquatic Center.

3.0 PROPOSED INFRASTRUCTURAL IMPROVEMENTS

3.1 Water System

Based on the Department of Water Supply's domestic guidelines, average daily demand for the 48 transitional units, 30 affordable housing

units, 3,000 s.f. child day care center, and 11,500 s.f. resource center proposed is estimated to range between 36,000 and 40,000 gpd. A new line will be extended up from the end of the County system at the intersection of Mill and Shaw Streets and looped within the project site. Each building will be metered separately. Fire hydrants will be dispersed throughout the project site to provide overlapping coverage and fire protection to all structures within a radius of 150 feet as required by the Maui County Fire Department. The existing source, storage and transmission systems have the capacity to satisfy the domestic and fire flow demands of the project.

3.2 Sewer System

According to the County's Division of Wastewater Management Division, their sewer system ends on Shaw Street on the makai side of Honoapiilani Highway. However a sewer line was extended across Honoapiilani Highway for the Lahaina Aquatic Center. Therefore a tie-in will be made to the Lahaina Aquatic Center system on the mauka side of Honoapiilani Highway. A gravity line will be extended from the project site to this tie-in point on the mauka side of Honoapiilani Highway. The WSRC project is expected to generate between 24,000 and 28,000 gpm for wastewater daily at full build-out.

3.3 Drainage System

Post development runoff from the 5.0 acre project site at full build-out is expected to be 22.7 cfs for a 50-year recurrent interval rainfall. A storm drain system with catch basins spaced at appropriate locations throughout the site will be installed to direct runoff into onsite subsurface retention facilities. These retention facilities which consist of large diameter perforated culverts located within the parking lots will be sized to retain the additional runoff generated by the project. (See Figure 5.)

The interim diversion channel constructed by NRCS keeps offsite runoff from sheet flowing across the project site. In addition, according to the NRCS interim plan offsite runoff will first be directed into the existing empty (punawai) reservoir located 200 feet east of the project site. Since this reservoir is not large enough to handle all of the offsite runoff during a 100 year storm, a spillway was constructed at its southwest corner of the reservoir to direct the overflow toward the recently constructed diversion channel. (See Figure 6.) This reservoir will also be fenced for safety and to prevent unlawful dumping. The Lahaina Watershed plan developed by the NRCS calls for a concrete lined channel being constructed between this reservoir and Lahainaluna Road in the future. (See Figure 7.) Runoff from the project access road will be directed into a subsurface retention system in the shoulder of this road above Mill Street.

3.4 Roadway

Access to the project site will be via Shaw Street which is presently paved up to Mill Street. A 24 feet wide paved road will be constructed from Mill Street to the project site to provide all-weather access to the project site.

According to the Traffic Impact Analysis Report prepared by Parsons Brinckerhoff, the existing signalized intersection at Shaw Street and Honoapiilani Highway has adequate capacity to handle the additional traffic generated by the WSRC project.

3.5 Electricity, Telephone and CATV

Overhead electrical, telephone and cable television (CATV) lines will be extended from existing overhead lines on Honoapiilani Highway to the project site. The distribution systems for these facilities within the project site will also be kept overhead for economic reasons.

4.0 CONCLUSION

Based on the foregoing it is reasonable to conclude that any project-related impact can and will be readily mitigated with the construction and installation of appropriate improvements mentioned above.

5.0 REFERENCES

A. Water System Standard, Department of Water Supply, Volume 1 dated 1985.

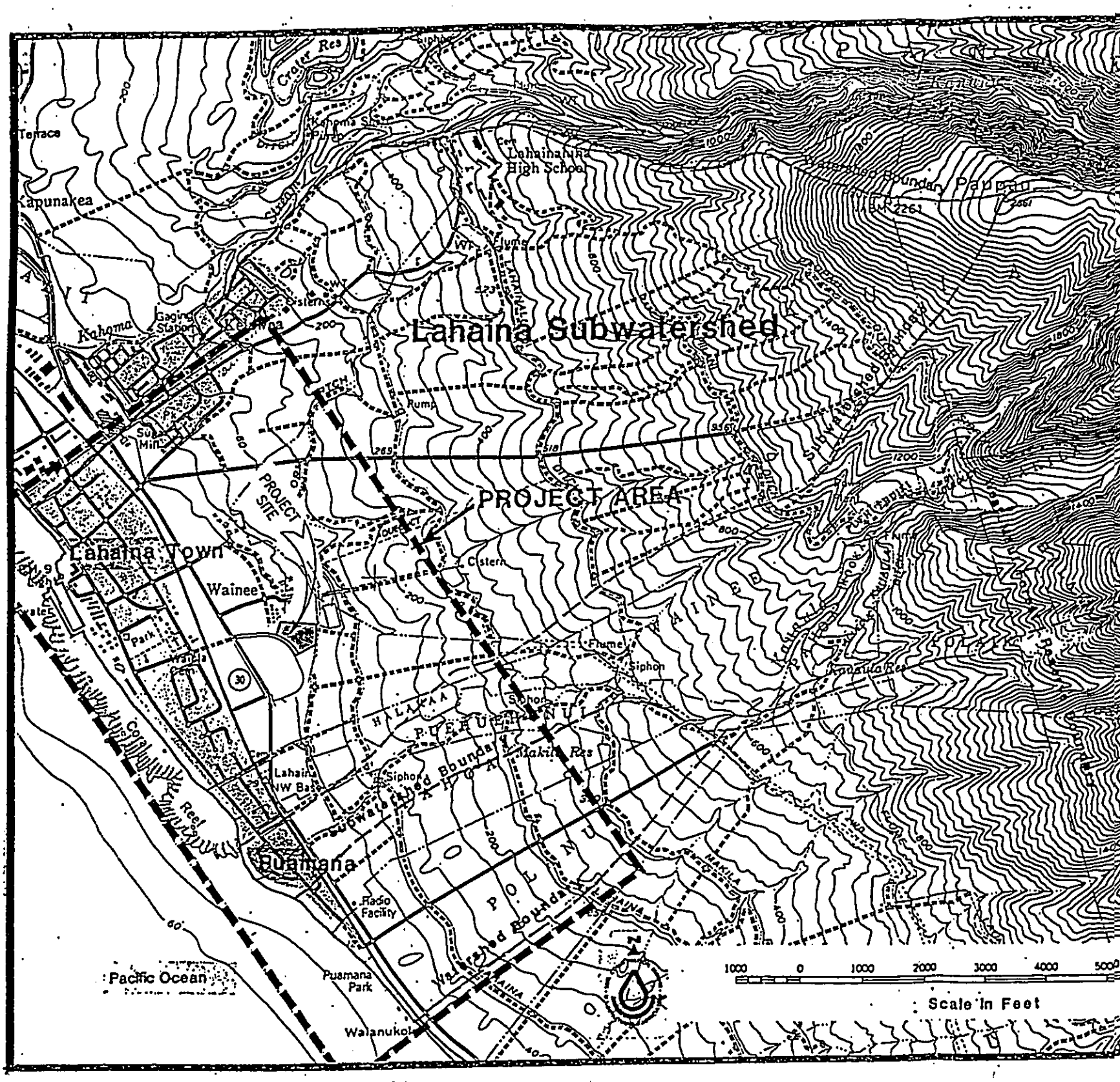
B. Title MC-15, Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui, November, 1995.

C. Final Watershed Plan and Environmental Assessment, August 1992, by U.S. Department of Agriculture, SCS.

FIGURES

1. NRCS Watershed Map
2. Map of Offsite Contributory Drainage Area
3. FIRM Map
4. Vicinity Map
5. Conceptual Utility Plan
6. Map of Existing Reservoir with Spillway
7. NRCS Plan of Proposed Improvements

DOCUMENT CAPTURED AS RECEIVED



Source: LAHAINA QUADRANGLE, U. S. Geological Survey

Figure A

WATERSHED MAP

Lahaina Watershed, Maui Count

Source: NRCS Lahaina Watershed Plan

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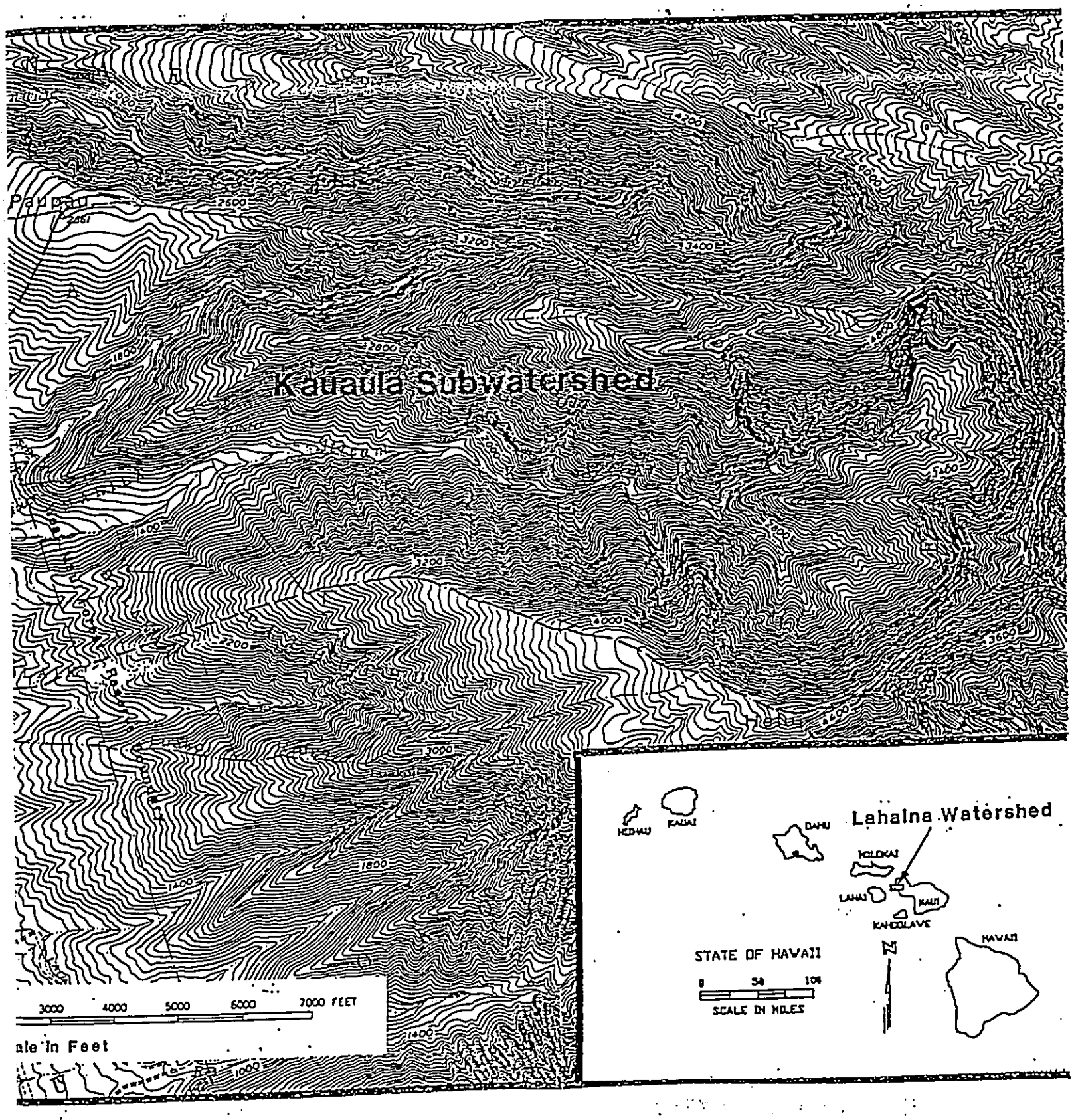

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HED MAP

d, Maui County, Hawaii

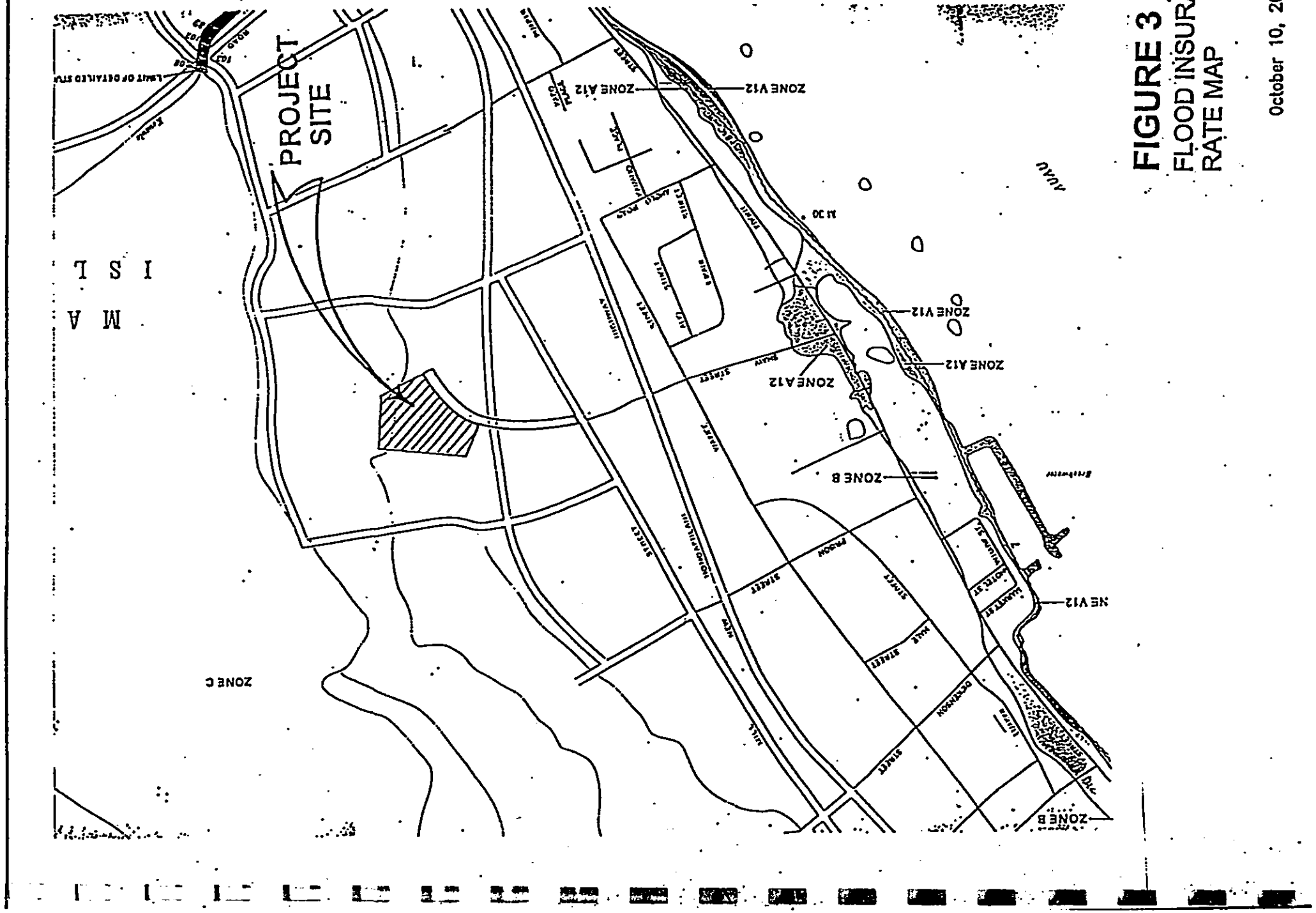
FIGURE 1

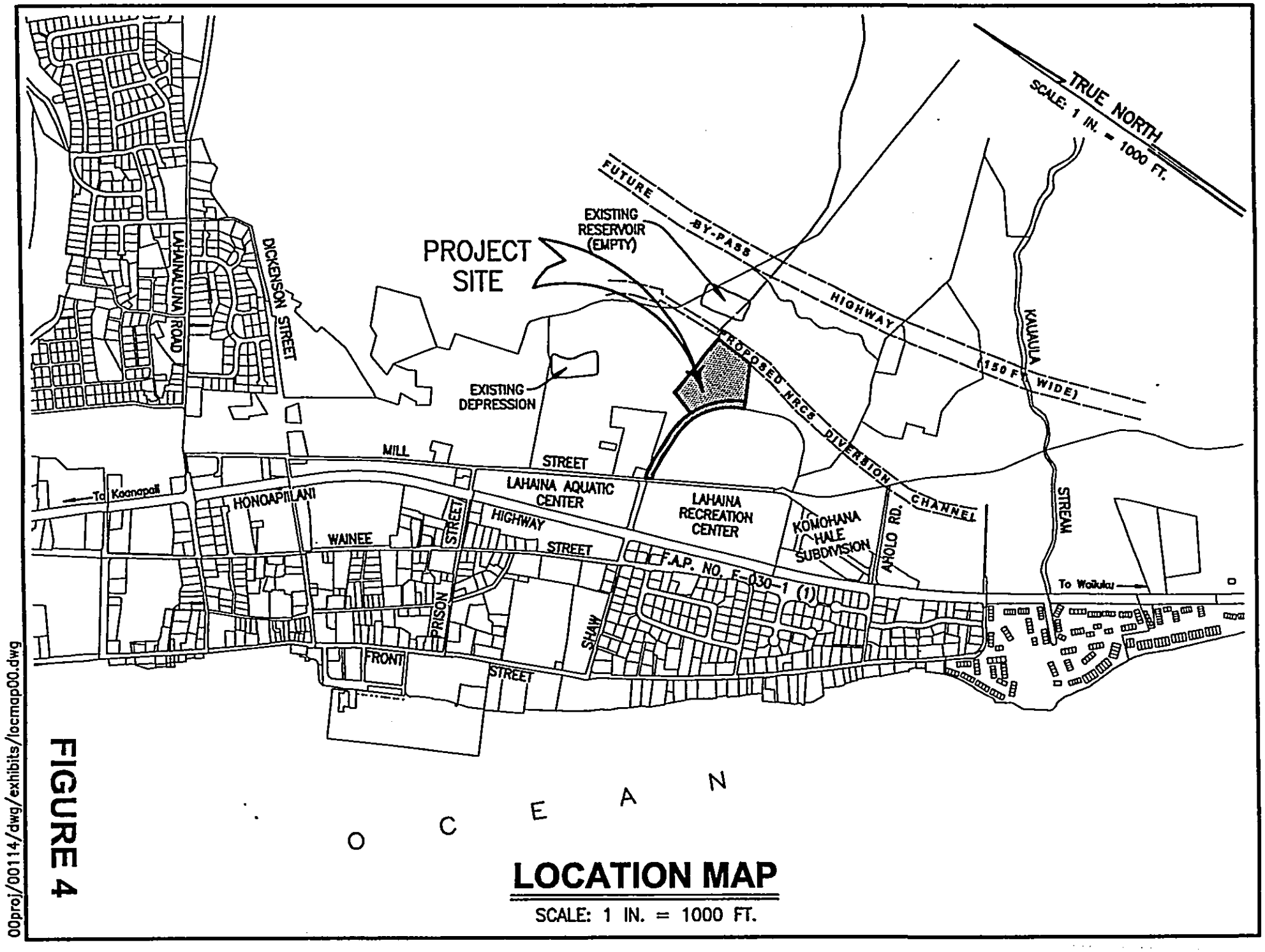
MAP/DRAWING#

100 A

FIGURE 3
FLOOD INSURANCE
RATE MAP

October 10, 2000




TRUE NORTH
SCALE: 1 IN. = 1000 FT.
FUTURE BY-PASS HIGHWAY (150 FT. WIDE)
EXISTING RESERVOIR (EMPTY)
PROJECT SITE
EXISTING DEPRESSION
PROPOSED NRCS DIVERSION CHANNEL
KAUAULA STREAM
DICKENSON STREET
LAHAINALUNA ROAD
MILL STREET
To Kaanapali
HONOAPIILANI HIGHWAY
WAINEE STREET
LAHAINA AQUATIC CENTER
LAHAINA RECREATION CENTER
KOMOHANA HALE SUBDIVISION
AHOLO RD.
F.A.P. NO. F-030-1 (1)
To Wailuku
PRISON STREET
FRONT STREET
SHAW
O C E A N
LOCATION MAP
SCALE: 1 IN. = 1000 FT.
FIGURE 4
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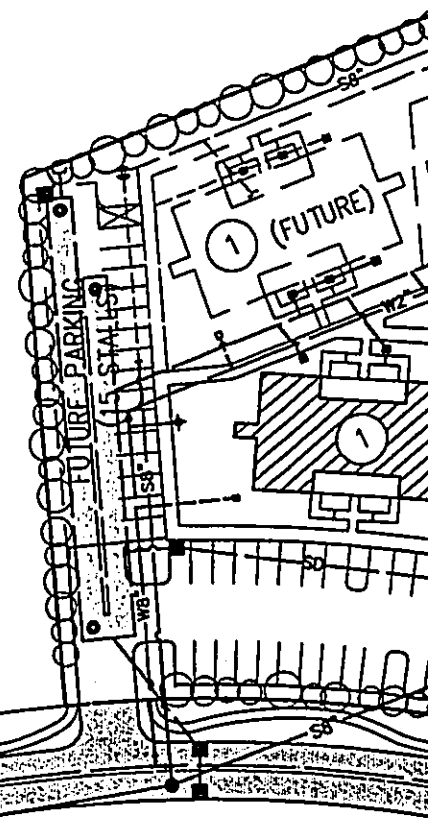
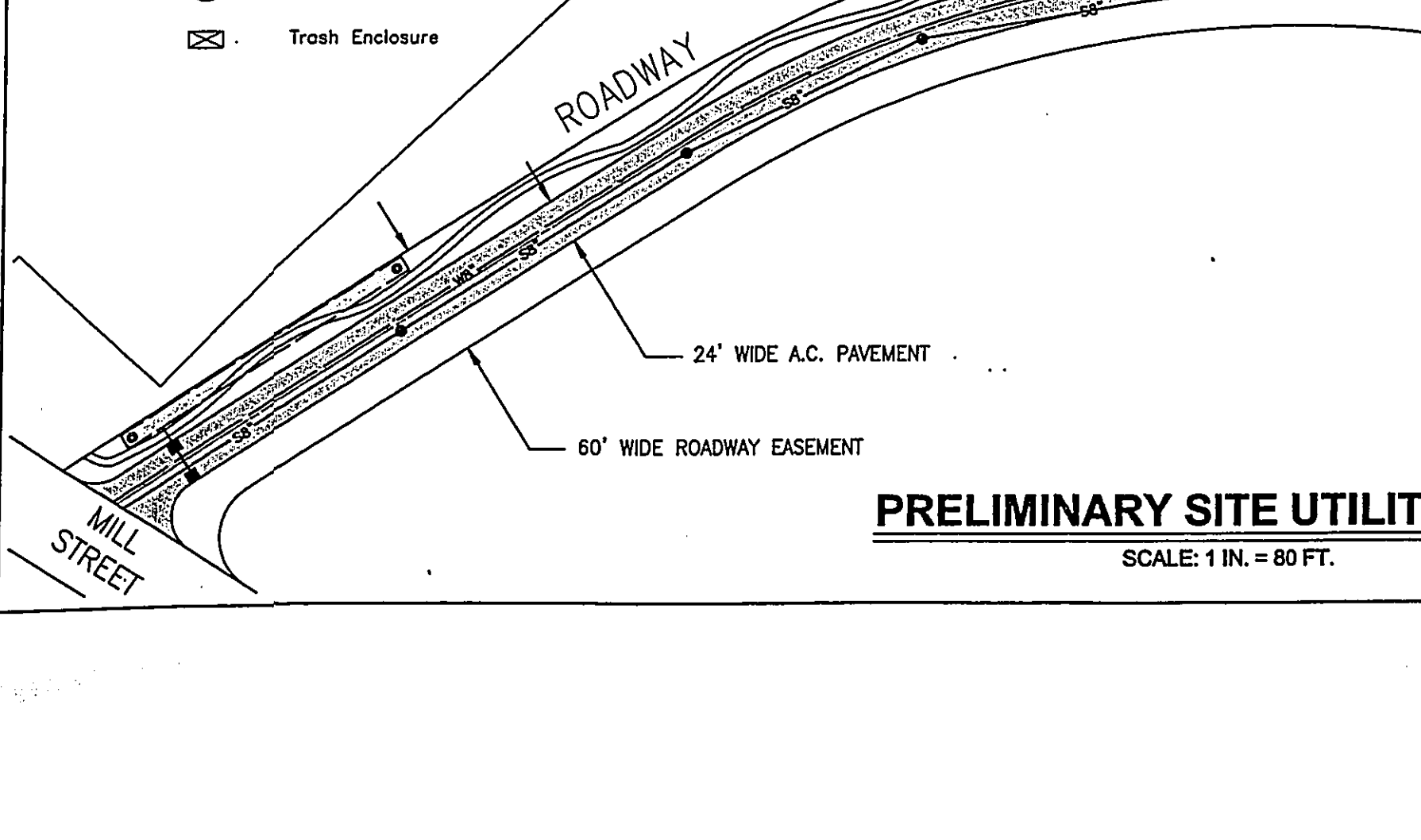
LEGEND:

- Sewer Manhole
- Drain Manhole
- Grated Inlet
- Fire Hydrant
- S8"—— Sewerline w/Size
- W10"—— Waterline w/Size
- SD—— Drainline
- ---S8"--- Future Sewerline w/Size
- ---W10"--- Future Waterline w/Size
- ---SD--- Future Drainline
- (1) Transitional Housing
- (2) Affordable Housing
- (L) Laundry Building
- (M) Maintenance Building
- ⊠ Trash Enclosure





PRELIMINARY SITE UTILITY

SCALE: 1 IN. = 80 FT.

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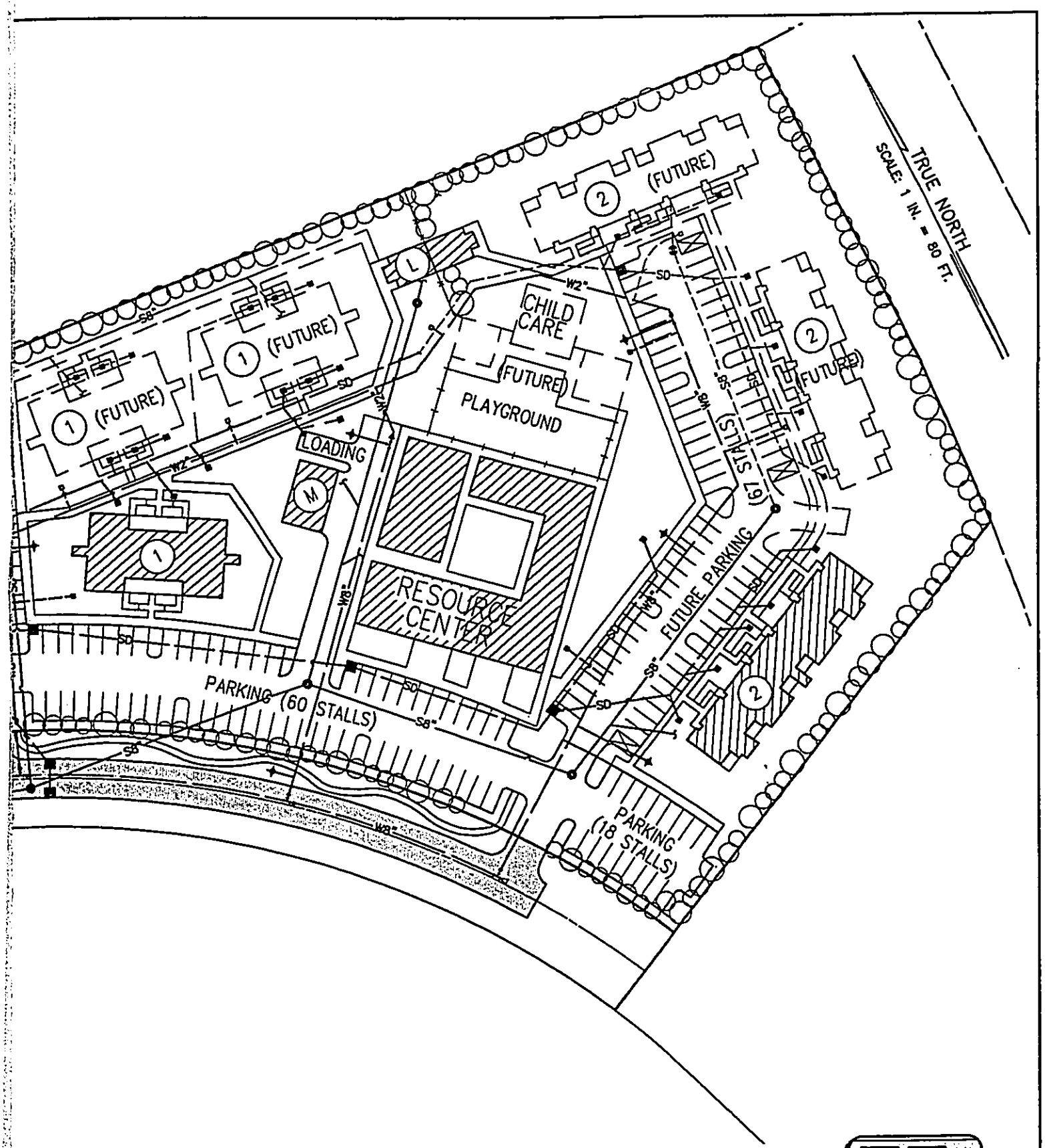

E UTILITY PLAN

= 80 FT.

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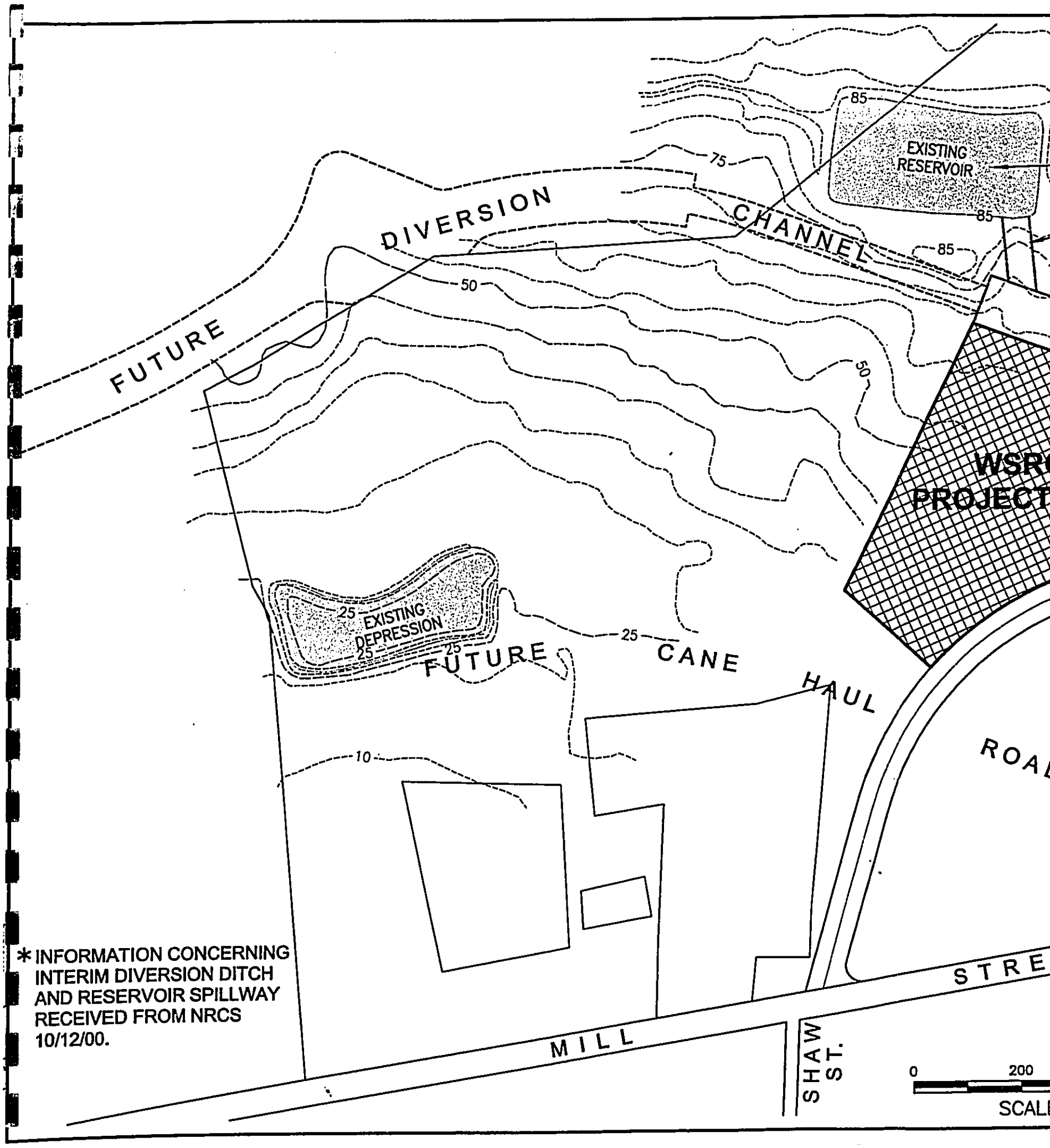
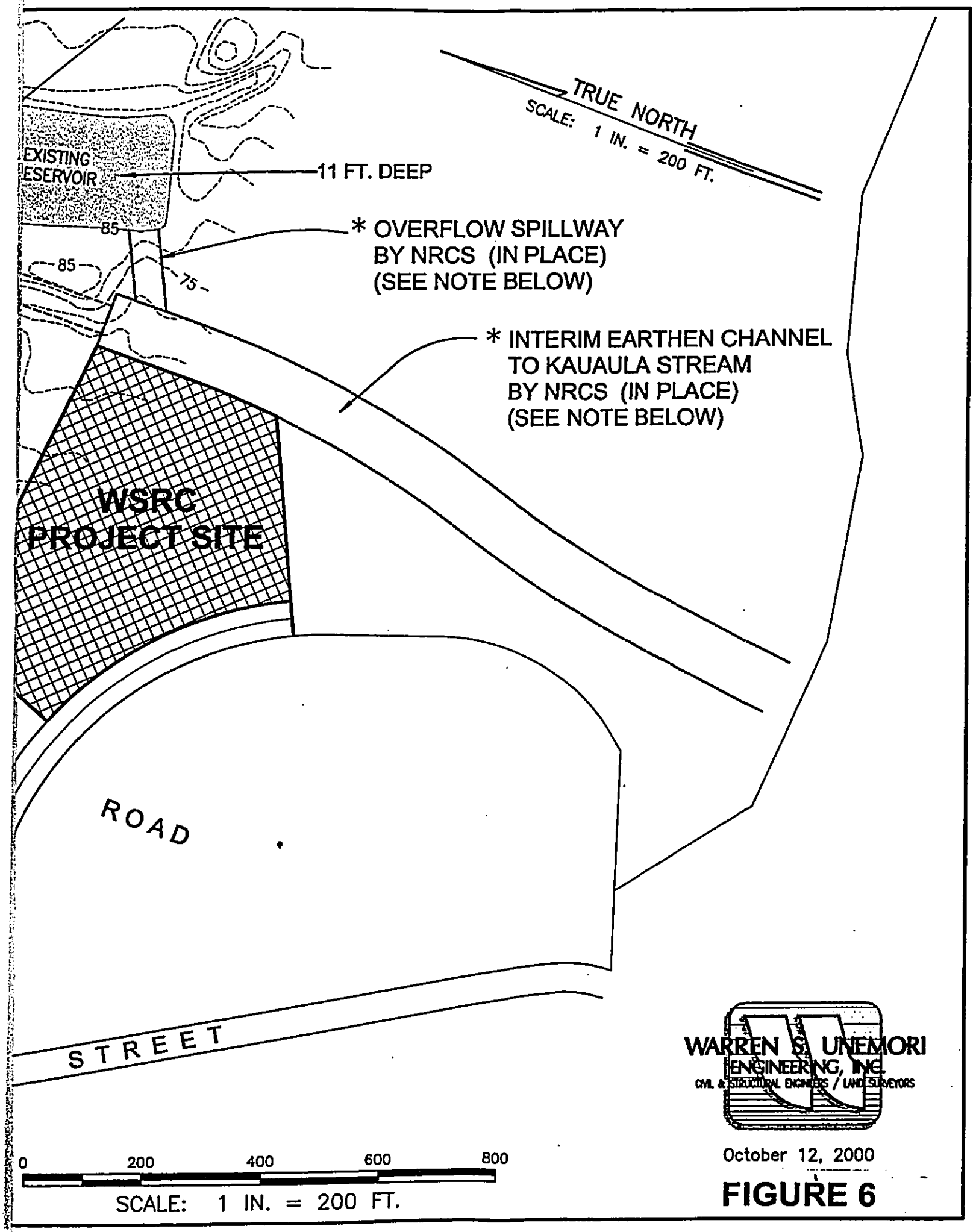
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

October 10, 2000
Revised: November 13, 2000

FIGURE 5



* INFORMATION CONCERNING INTERIM DIVERSION DITCH AND RESERVOIR SPILLWAY RECEIVED FROM NRCS 10/12/00.



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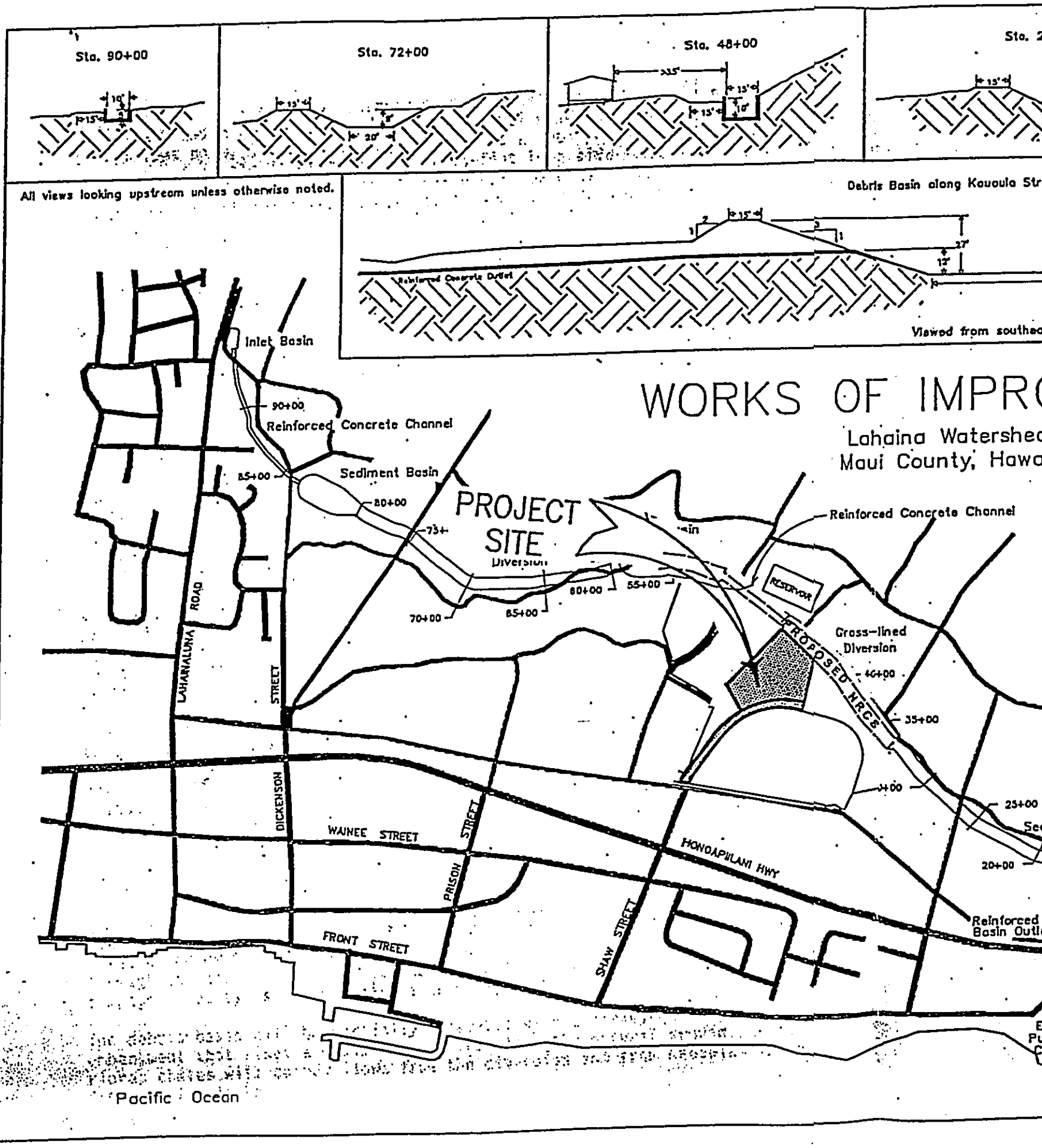
October 12, 2000

FIGURE 6



Source: NRCS Lahaina Watershed Plan

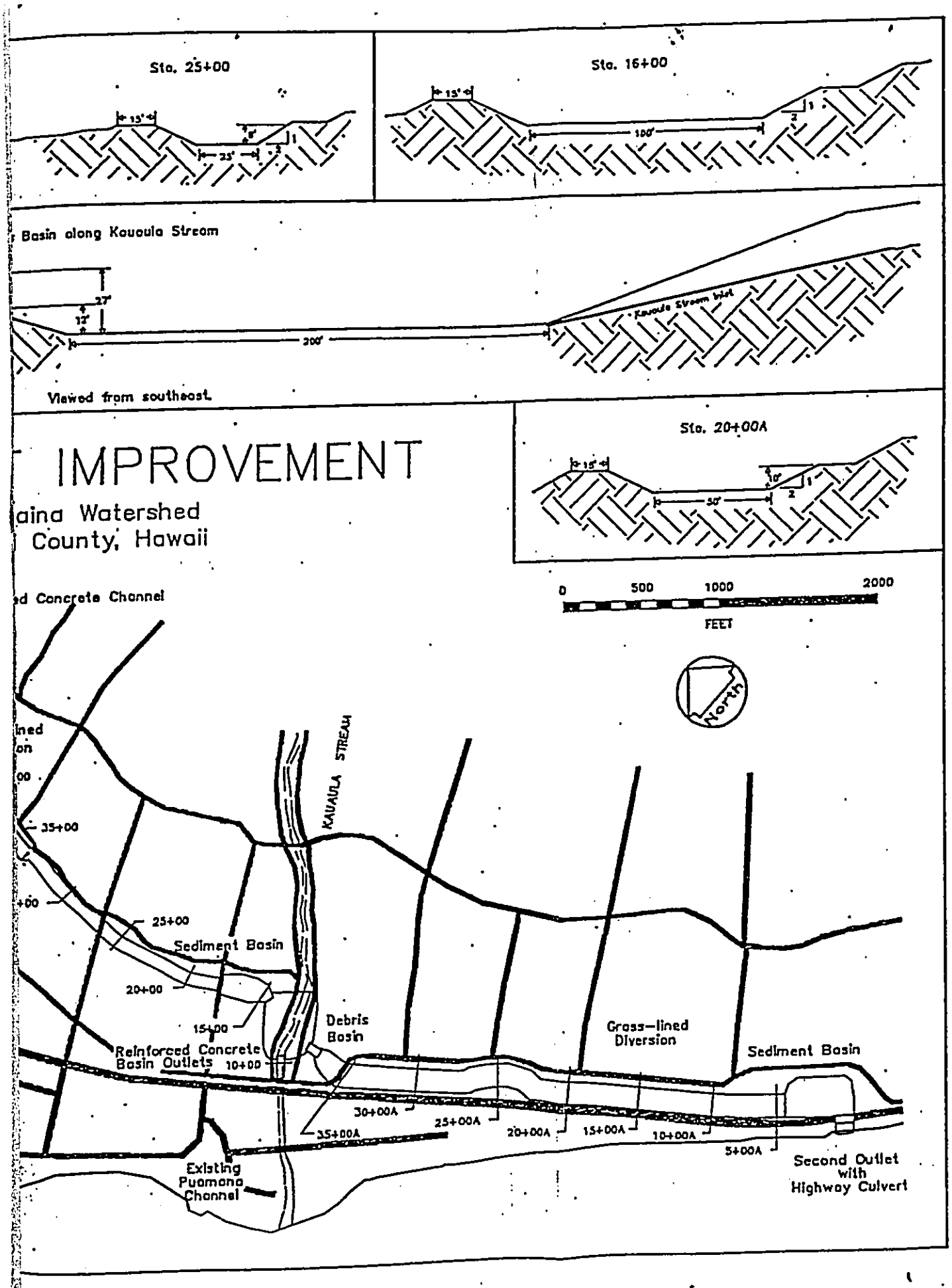

Sta. 25+00
Sta. 16+00
Basin along Kauaula Stream
Viewed from southeast
Sta. 20+00A
IMPROVEMENT
aina Watershed
County, Hawaii
d Concrete Channel
0
500
1000
2000
FEET
North
KAUAULA STREAM
35+00
25+00
Sediment Basin
20+00
15+00
Debris Basin
Reinforced Concrete Basin Outlets
10+00
Grass-lined Diversion
Sediment Basin
30+00A
25+00A
20+00A
15+00A
10+00A
5+00A
35+00A
Existing Puamana Channel
Second Outlet with Highway Culvert

FIGURE 7

APPENDIX A
PRELIMINARY DRAINAGE REPORT

Established 1969

Preliminary Drainage Report

WESTSIDE RESOURCE CENTER

Lahaina, Maui, Hawaii
TMK: (2) 4-6-15: Portion 1

Prepared For:

Ka Hale A Ke Ola
Wailuku, Maui, Hawaii

REED M. ARIYOSHI
LICENSED PROFESSIONAL ENGINEER
NO. 5465-C
HAWAII, U.S.A.

Warren S. Unemori Engineering, Inc.
Civil and Structural Engineers - Land Surveyors
2145 Wells Street, Suite 403
Wailuku, Hawaii 96793

Date: October, 2000

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EXHIBITS

APPENDICES

Preliminary Drainage Report
for
Westside Resource Center

I. INTRODUCTION

This report has been prepared to examine both the existing drainage conditions and the proposed drainage plan for the subject development.

II. PROPOSED PROJECT

A. Site Location:

The project site is located in Lahaina, on the island of Maui, and in the State of Hawaii. It is situated approximately 1100 feet east of Honoapiilani Highway and approximately 600 feet east of Mill Street. The project site is situated on land that was previously occupied by Wainee Village. (see Exhibit 1).

The Westside Resource Center site occupies an area of 5.0 acres. In connection with the implementation of the project, a 60 ft. wide roadway easement (1.5 acres) will be developed to provide access to the project site.

B. Project Description:

The proposed plan for the Westside Resource Center will comprise of transitional and affordable housing units, a child care, and resource center including support facilities on the site. Proposed improvements include asphalt paved roadways, concrete curb, concrete sidewalks and landscaping. Utility improvements will consist of underground sewer, drainage and water distribution systems and overhead electrical, telephone and cable-television distribution systems.

II. EXISTING CONDITIONS:

A. Topography and Soil Conditions:

The project site, which is currently undeveloped, was the site of the Wainee Village. All remnants of the village have been removed except for some trees. The project site generally slopes from an elevation of approximately (+) 65± feet M.S.L. to approximately (+) 35± feet M.S.L. in an easterly to westerly direction.

According to the *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* [1], prepared by the United States Department of Agriculture, Soil Conservation Service, the soil classification found on majority of the project site is the Wainee very stony silty clay, 3 to 7 percent slopes (WxB). The remainder of the project site has the Ewa silty clay loam, 0 to 3 percent slopes (EaA). Both soil groups are characterized as having slow runoff. (See Exhibit 2).

B. Drainage:

According to our calculations, approximately 7.6 cfs is being generated by the project site. This surface runoff sheet flows across the site into an existing depression located above Mill Street and a former cane haul road. Once this depression exceeds its capacity, the surface runoff overflows toward a shallow retention basin located north of the Lahaina Aquatic Center, mauka of Honoapiilani Highway. Two 24-inch culverts then convey the flow across Honoapiilani Highway onto private lands located on the makai side of the highway.

Contributory offsite drainage area above the project site contains two former irrigation reservoirs. The first located approximately 200 feet and the second located approximately 2200 feet mauka of the project site. One of these reservoirs will be used to help alleviate some of the offsite surface runoff. According to our calculations, peak runoff for a 100 year recurrence interval - 24 hour duration storm is around 334 cfs. This offsite surface runoff sheet flows across the project site and into the existing depression mentioned above.

C. Flood and Tsunami Zone:

According to Panel Number 150003 0163C of the Flood Insurance Rate Map [2], dated August 3, 1998, prepared by the United States Federal Emergency Management Agency, the project site is situated within Zone C, which is designated as an area subject to minimal flooding. (See Exhibit 3).

IV. DRAINAGE PLAN

A. General:

The design of the drainage system for the proposed development shall include minimal alterations to the natural drainage pattern of both the onsite and offsite surface runoff.

According to our calculations, the post development peak runoff from the project site is expected to be approximately 22.7 cfs for a 50 year recurrence interval - 1 hour duration storm. This translates to a net increase of approximately 15.1 cfs due to the project. Surface runoff will be intercepted by new grated inlet type catch basins and then conveyed by means of an underground drainage system into a

subsurface detention facility located within the lower parking lot for the project. This subsurface system which consists of large diameter perforated pipes, will be designed to accommodate the increase in surface runoff volume while allowing a small diameter pipe to release the pre- development surface runoff volume into the direction of the existing depression. An earthen berm or rock wall will also be constructed along the mauka boundary of the project site to prevent offsite runoff from entering into the project site.

Offsite surface runoff will first be directed to the existing irrigation reservoir located 200 feet mauka of the project site. When this irrigation reservoir reaches its maximum capacity, a spillway at its southwesterly corner will direct the overflow toward the newly constructed diversion channel recently constructed by NRCS.

B. Hydrologic Calculations:

The onsite hydrologic calculations are based on the "Rules for the Design of Storm Drainage Facilities in the County of Maui", Title MC-15, Chapter 4 and the "Rainfall Frequency Atlas of the Hawaiian Islands", Technical Paper No. 43, U. S. Department of Commerce, Weather Bureau.

Rational Formula used:

$$Q = CIA$$

Where
- Q = Rate of Flow (cfs)
- C = Runoff Coefficient
- I = Rainfall Intensity (inches/hour)
- A = Area (Acres)

The offsite hydrologic calculations are based on procedures by the U.S. Department of Agriculture, Soil Conservation Service (SCS). This procedure is

described in detail in the SCS National Engineering Handbook, Section 4, Hydrology (NEH-4). Hydrologic calculations were computed by utilizing computer software simulating "SCS Computer Program for Project Formulation, Hydrology (TR-20)", which is based on the procedures outlined in NEH-4.

The hydrologic calculations for this project may be found in Appendix A.

C. Conclusion:

By utilizing the existing reservoir for additional storage of offsite runoff as proposed, less storm water will be going into the existing natural depression northwest of the project site. With the installation of an onsite subsurface drainage facility, the post development peak runoff rate will be maintained at pre-development rates. Therefore, it is our professional opinion that the proposed development will not have any additional adverse effect on the downstream properties.

Report Prepared By:

Carlos R. Rivera

Report Reviewed By:

Reed M. Ariyoshi, P.E.

VII. REFERENCES

1. *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.* August 1972. United States Department of Agriculture, Soil Conservation Service.

2. *Flood Insurance Rate Map, Maui County, Hawaii.* Community-Panel Number 150003 0163C. August 3, 1998. Federal Emergency Management Agency, Federal Insurance Administration.

3. *Rainfall Frequency Atlas of the Hawaiian Islands, Technical Paper No. 43.* 1962. U.S. Department of Commerce, Weather Bureau.

4. *Rules for the Design of Storm Drainage Facilities in the County of Maui.* July 1995. Department of Public Works and Waste Management, County of Maui.

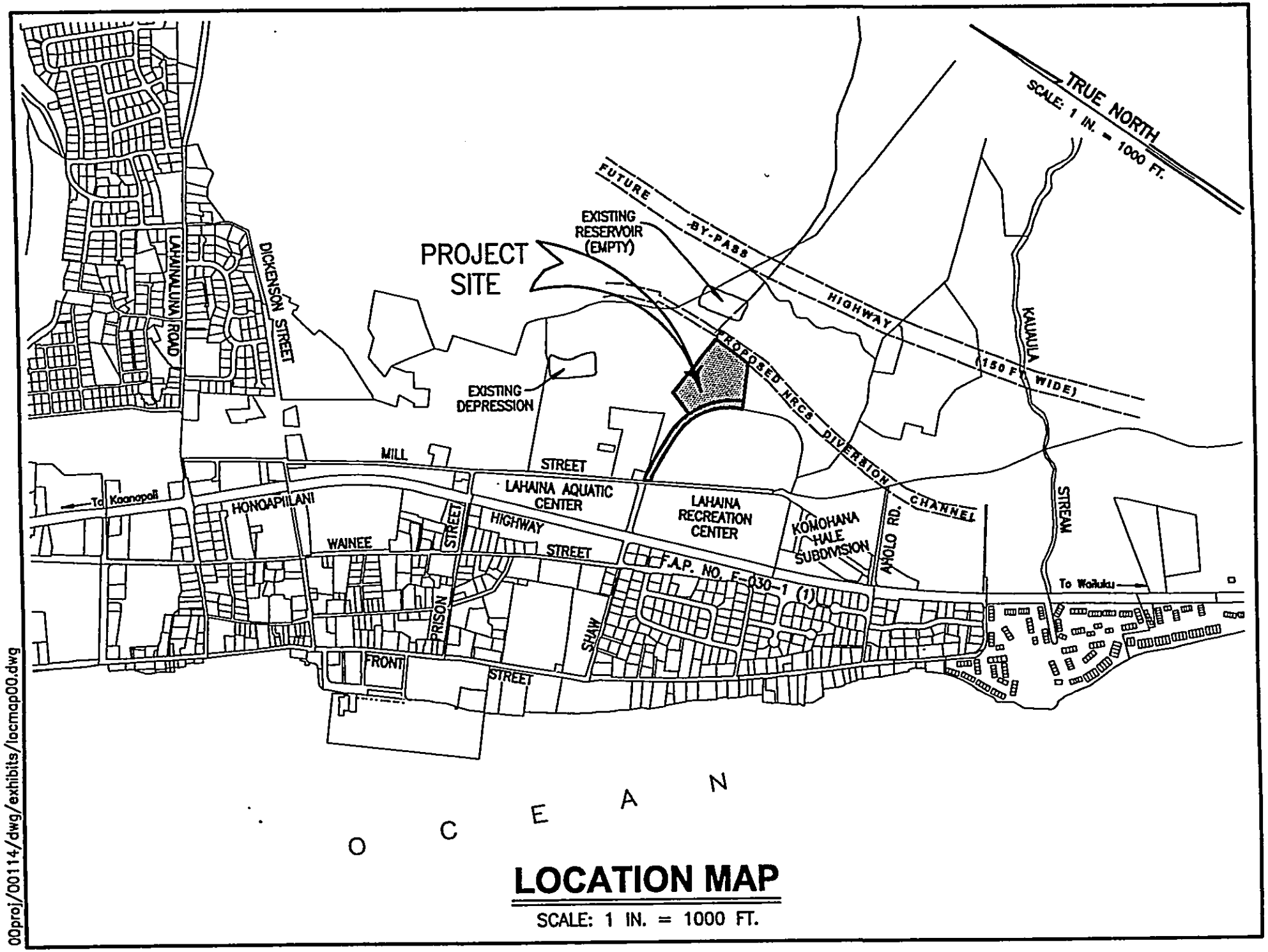
EXHIBITS

1 Location Map

2 Soil Survey Map

3 Flood Insurance Rate Map

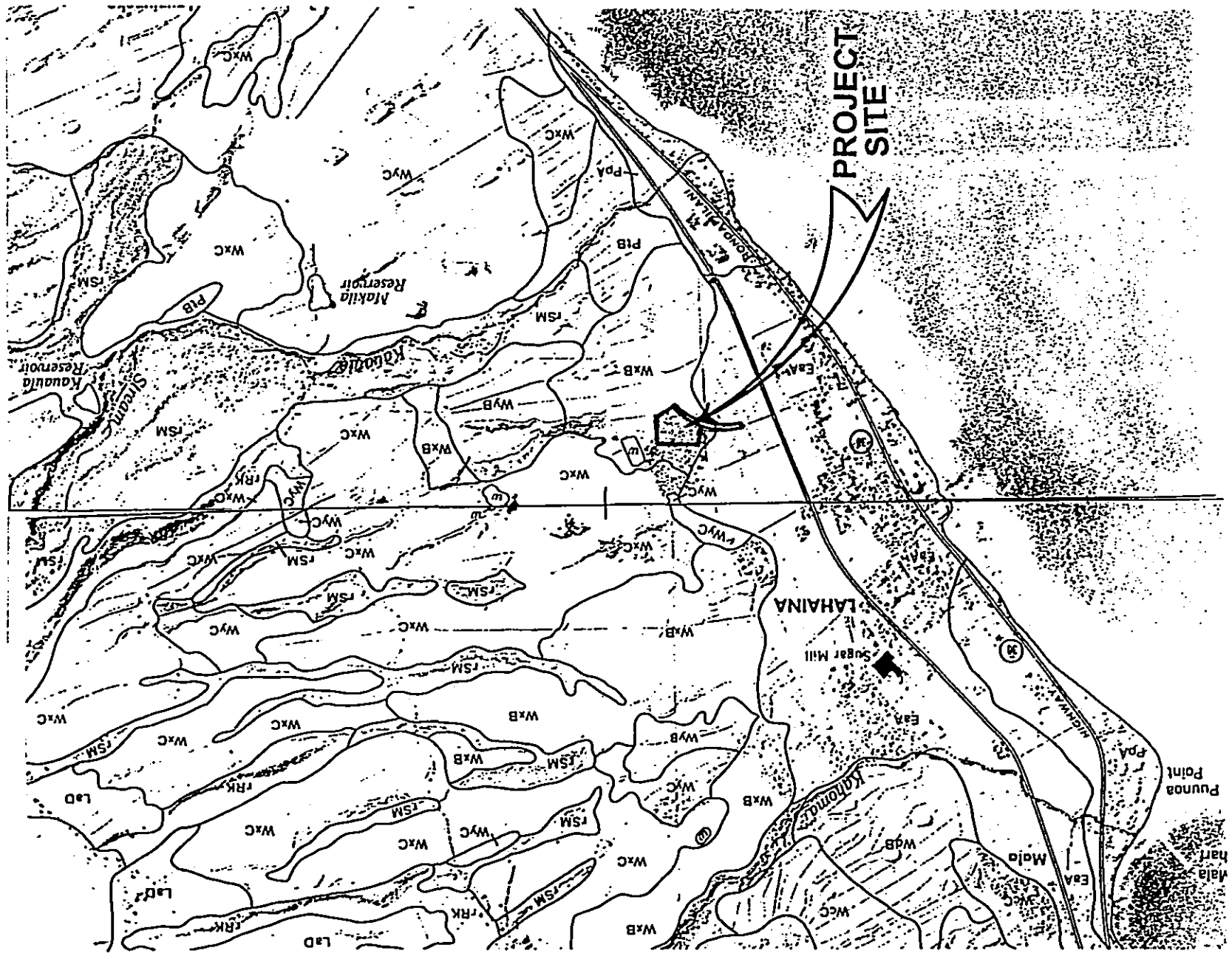
4 Offsite Drainage Area



LOCATION MAP

SCALE: 1 IN. = 1000 FT.

00proj/00114/dwg/exhibits/locmap00.dwg



WARREN S. UNEMORI ENGINEERING, INC.

October 10, 2000

EXHIBIT 2
SITE SPECIFIC SOIL CLASSIFICATION MAP

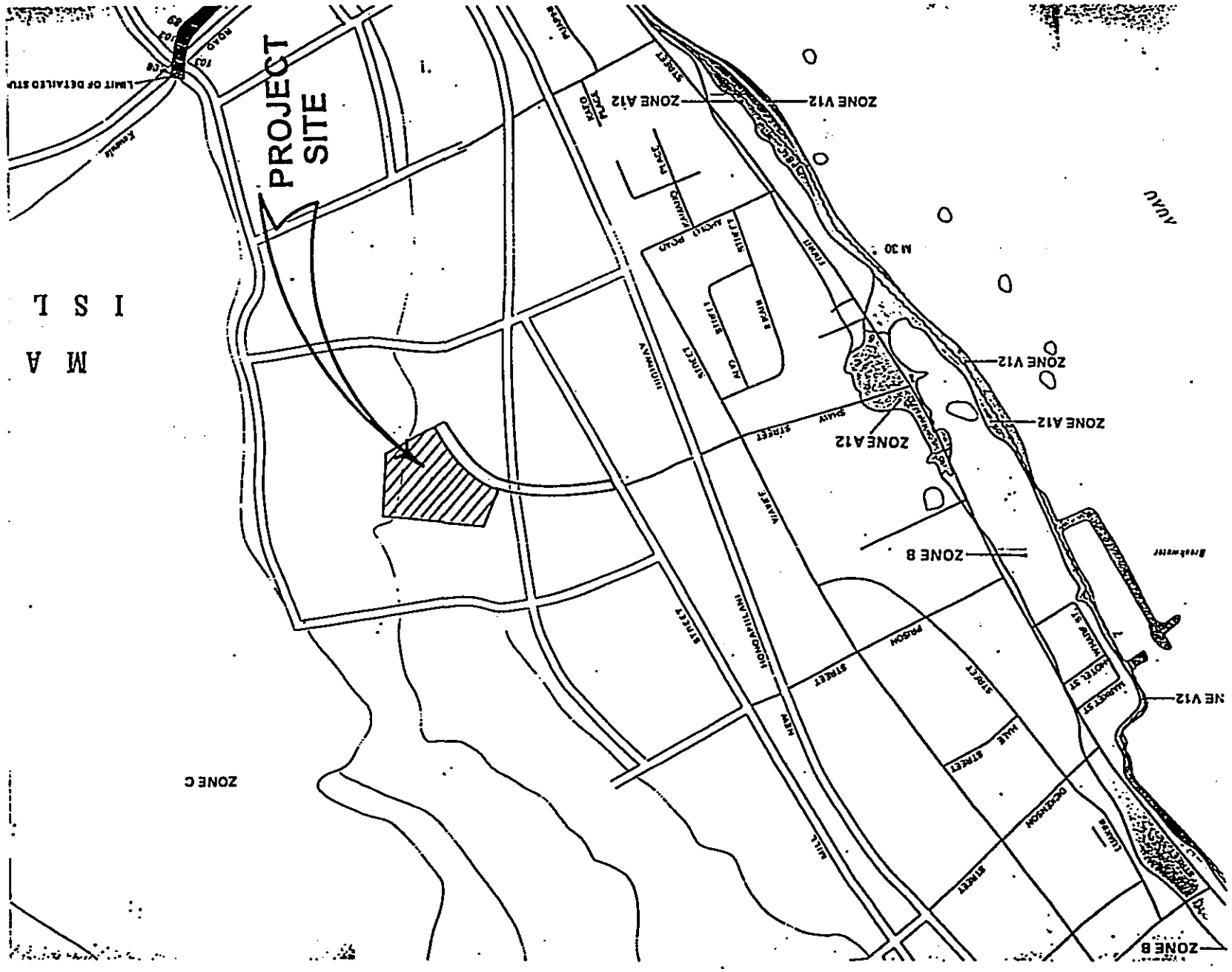


EXHIBIT 3
FLOOD INSURANCE
RATE MAP

MAP/DRAWING#

100 B

APPENDIX A

HYDROLOGIC CALCULATIONS

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: October 9, 2000

HYDROLOGIC CALCULATIONS: PRE-DEVELOPMENT

Objective: To determine the pre-development runoff of the project site

1. 50-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Lahaina, Maui,
R(50 Yr.-1Hr.) = 2.50 inches

2. Total Area:

Area (Ac.):		6.50

3. Runoff Coefficents:

Infiltration:	Medium	0.07
Relief:	Rolling (5-15%)	0.03
Vegetal Cover:	Good (10-50%)	0.03
Development Type:	Agricultural	0.15
	Runoff Coeff't., C:	0.28

4. Time of Concentration:

Approx. Elev. Diff'l. (ft.)		30
Higher Elev. (ft.):	65	
Lower Elev. (ft.):	35	
Approx. Runoff Length (ft.):		600
Average Slope:		5.00%
Time of Concentration (min.):		19

5. Intensity:

Intensity (in./hr.):	4.2

6. Total Runoff:

Q = C x I x A (cfs):	7.64

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: October 9, 2000

HYDROLOGIC CALCULATIONS: POST-DEVELOPMENT

Objective: To determine the post-development runoff of the project site

1. 50-Yr. - 1 Hr. Rainfall:
From "Rainfall Frequency Atlas of the Hawaiian Islands", for Lahaina, Maui,
R(50 Yr.-1Hr.) = 2.50 inches

2. Total Area:

	Area (Ac.):		6.50

3. Runoff Coefficents:

Landscape Area:	Area (Ac.):	2.71	
	Infiltration:	Medium	0.07
	Relief:	Flat (0-5%)	0.00
	Vegetal Cover:	High (50-90%)	0.00
	Development Type:	Agricultural	0.15
		Runoff Coeff't., C:	0.22
Roadway Area:	Area (Ac.):	2.48	
		Runoff Coeff't., C:	0.95
Roof Area:	Area (Ac.):	1.31	
		Runoff Coeff't., C:	0.95
		Weighted Runoff Coeff't., C:	0.65

4. Time of Concentration:

Approx. Elev. Diff'l. (ft.)		45
Higher Elev. (ft.):	65	
Lower Elev. (ft.):	20	
Approx. Runoff Length (ft.):		1,075
Average Slope:		4.19%
Time of Concentration (min.):		9

5. Intensity:

Intensity (in./hr.):	5.4

6. Total Runoff:

Q = C x I x A (cfs):	22.66

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: October 9, 2000

SUBSURFACE DRAINAGE SYSTEM ANALYSIS AND DESIGN

Project:	**Westside Resource Center**
Location:	**Lahaina, Maui, Hawaii**
Job Number:	**WSUE #00114**
Objective:	To determine the storage requirements for partial attenuation of the anticipated increase in onsite surface runoff attributable to the project development. A recurrence interval of fifty (50) years is used.

I. Determine 50-Yr. - 1 Hr. Rainfall:

From "Rainfall Frequency Atlas of the Hawaiian Islands", for Lahaina, Maui,
R(50 Yr.-1Hr.) = 2.50 inches

II. Determine Pre-Development Runoff:

Pre-Development Component Areas:

Total Area (Ac.):		5.56

Pre-Development Runoff Coefficents:

Infiltration:	Medium	0.07
Relief:	Rolling (5-15%)	0.03
Vegetal Cover:	Good (10-50%)	0.03
Development Type:	Agricultural	0.15
	Composite Runoff Coeff't., C:	0.28

Pre-Development Time of Concentration:

Approx. Elev. Diff'l. (feet):		30.00
Higher Elev. (ft.):	65.0	
Lower Elev. (ft.):	35.0	
Approx. Runoff Length (ft.):		600
Average Slope:		5.0%
Ground Character:		poor grass
Time of Concentration (min.):		19

Pre-Development Intensity:

Intensity (in./hr.):	4.2

Pre-Development Runoff:

Q (pre-dev.) = C x I x A (cfs):	6.54
Allowable Release Volume (cfs):	5.88

III. Determine Post-Development Runoff:

Total Area (Ac.):	5.56

***Post-Development* Runoff Coefficent:**

Weighted Runoff Coeff't., *C:	0.66
C x A (post development):	3.67

IV. Establish Initial Trench Cross Section Parameters:

Cover Over Pipe (ft.):	1.00
Pipe Diameter (ft.):	6.00
Cradle Depth Below Pipe (ft.):	2.00
Cradle Thickness on Sides of Pipe (ft.):	2.00
Total Trench Depth (ft.):	9.0
Total Trench Width (ft.):	10.0
Gross Trench Cross Sectional Area (sf/lf):	90.0
Pipe Cross Sectional Area (sf/lf):	28.3
Trench Aggreg. Cross Sectional Area (sf/lf):	61.7

V. Determine Exfiltration:

Assume Exfiltration Limited to Sides of Trench Only:

Assumed Initial Length of Pipe / Trench (ft.):	325.00

VI. Determine Adequacy of Storage Volume Provided:

Determine Required Storage Volume:

Analytical procedures are based on methods prescribed in "Modern Sewer Design" (dated 1980, by the American Iron and Steel Institute).

Intensity values are obtained from the the Intensity-Duration Curves found page 122 of the "Drainage Master Plan for the County of Maui" (dated 1971, by R.M. Towill Corp.).

Time (min.)	I (in/hr)	Post-Dev. C x A (ac)	Accum. Runoff Vol. (cf)	Allow. Release (cf)	Storage Required. (cf)	Comments
(1)	(2)	(3)	(4)	(5)	(6)	
5	6.40	3.67	7,046	1,764	5,282	
10	5.10	3.67	11,229	3,528	7,701	
15	4.60	3.67	15,192	5,292	9,900	
20	4.20	3.67	18,495	7,056	11,439	
30	3.50	3.67	23,118	10,584	12,534	
40	3.10	3.67	27,302	14,112	13,190	Peak Storage
50	2.80	3.67	30,825	17,640	13,185	
60	2.50	3.67	33,026	21,168	11,858	
80	2.15	3.67	37,870	28,224	9,646	
100	1.95	3.67	42,934	35,280	7,654	
120	1.75	3.67	46,237	42,336	3,901	

(COL 4) = (COL 1) x (COL 2) x (COL 3) x (60 sec./min.)
(COL 5) = Q(allowable) x (COL 1) x (60 sec./min.)
(COL 6) = (COL 4) - (COL 5)

Maximum Storage Required (cf): 13190

Determine Provided Storage Volume:

Pipe Storage Capacity (cf):	9,189.2
Net Aggregate Cradle Storage Capacity (cf):	29,250.0
Gross Aggregate Cradle Volume (40% void ratio) (cf):	8,024.3
50% of void volume (cf):	4,012.2
Total Storage Capacity Provided (cf):	13,201.3

(Storage Provided = 13,201 cf) > (Storage Required = 13,190 cf); therefore initial assumptions based on 325 l.f. of 72-inch diameter pipe are acceptable.

Warren S. Unemori Engineering, Inc.
Wells Street Professional Center
2145 Wells Street , Suite 403
Wailuku, Maui , Hawaii 96793

Date: October 9, 2000

SUBSURFACE DRAINAGE SYSTEM ANALYSIS AND DESIGN

Project: **Westside Resource Center**

Location: **Lahaina, Maui, Hawaii**

Job Number: **WSUE #00114**

Objective: To determine the storage requirements for full attenuation of the onsite surface runoff attributable to the roadway improvements for the subject project. A recurrence interval of fifty (50) years is used.

I. Determine Accumulated Runoff Volume:

Volume = 6886 cf

Volume obtained from the attached Universal Rational Hydrograph

IV. Establish Initial Trench Cross Section Parameters:

Cover Over Pipe (ft.):	1.00
Pipe Diameter (ft.):	6.00
Cradle Depth Below Pipe (ft.):	2.00
Cradle Thickness on Sides of Pipe (ft.):	2.00
Total Trench Depth (ft.):	9.0
Total Trench Width (ft.):	10.0
Gross Trench Cross Sectional Area (sf/lf):	90.0
Pipe Cross Sectional Area (sf/lf):	28.3
Trench Aggreg. Cross Sectional Area (sf/lf):	61.7

V. Determine Exfiltration:

Assume Exfiltration Limited to Sides of Trench Only:

Assumed Initial Length of Pipe / Trench (ft.):	170.00

VI. Determine Adequacy of Storage Volume Provided:

Determine Provided Storage Volume:

Pipe Storage Capacity (cf):	4,806.6
Net Aggregate Cradle Storage Capacity (cf):	15,300.0
Gross Aggregate Cradle Volume (40% void ratio) (cf):	4,197.3
50% of void volume (cf):	2,098.7
Total Storage Capacity Provided (cf):	6,905.3

(Storage Provided = 6905 cf) > (Storage Required = 6886 cf); therefore initial assumptions based on 170 l.f. of 72-inch diameter pipe are acceptable.

W.S. UNEMORI ENGINEERING, INC.
Wailuku, Maui, Hawaii
OCTOBER 12, 2000

HYDROLOGIC REPORT FOR

Westside Resource Center

UNIVERSAL RATIONAL HYDROGRAPH

Q(PEAK) = C*I*A
50 YEAR STORM FREQUENCY

BASIN IDENTIFIER		Roadway Surface Runoff	
DISCHARGES INTO		Subsurface Drainage System	
BASIN AREA	=	0.94	ACRES
RUNOFF COEFF.	=	0.56	
RAINFALL INT.	=	4.20	IN/HR
TIME OF CONC.	=	19.00	MINUTES
VOLUME	=	6886.10	CUBIC FEET

TIME (MIN)	RUNOFF (C.F.S.)
0.0	0.0
9.5	0.1
19.0	0.3
28.5	0.5
38.0	0.7
47.5	1.5
57.0	2.2
66.5	1.7
76.0	1.1
85.5	0.9
95.0	0.7
104.5	0.6
114.0	0.5
123.5	0.4
133.0	0.2
142.5	0.2
152.0	0.2
161.5	0.1
171.0	0.0
180.5	0.0
190.0	0.0
199.5	0.0
209.0	0.0
218.5	0.0
228.0	0.0
237.5	0.0
247.0	0.0
256.5	0.0
266.0	0.0
275.5	0.0

Appendix E

Traffic Impact Analysis Report

TRAFFIC IMPACT ANALYSIS

Westside Resource Center

LAHAINA, MAUI, HAWAII

October 2000

PB PARSONS BRINCKERHOFF INC.

Over a Century of Engineering Excellence

TRAFFIC IMPACT ANALYSIS

WEST SIDE RESOURCE CENTER
Lahaina, Maui, Hawaii

October 2000
Revision A

Prepared For:

Ka Hale O Ke Ola
670 Waiale Drive
Wailuku, Hawaii 96793
(808) 242-7600

Prepared By:

Parsons Brinckerhoff Quade & Douglas, Inc.
Pacific Tower - Suite 3000
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Honolulu, HI 96813
(808) 531-7094

PBQD Reference Number:
16340A.01

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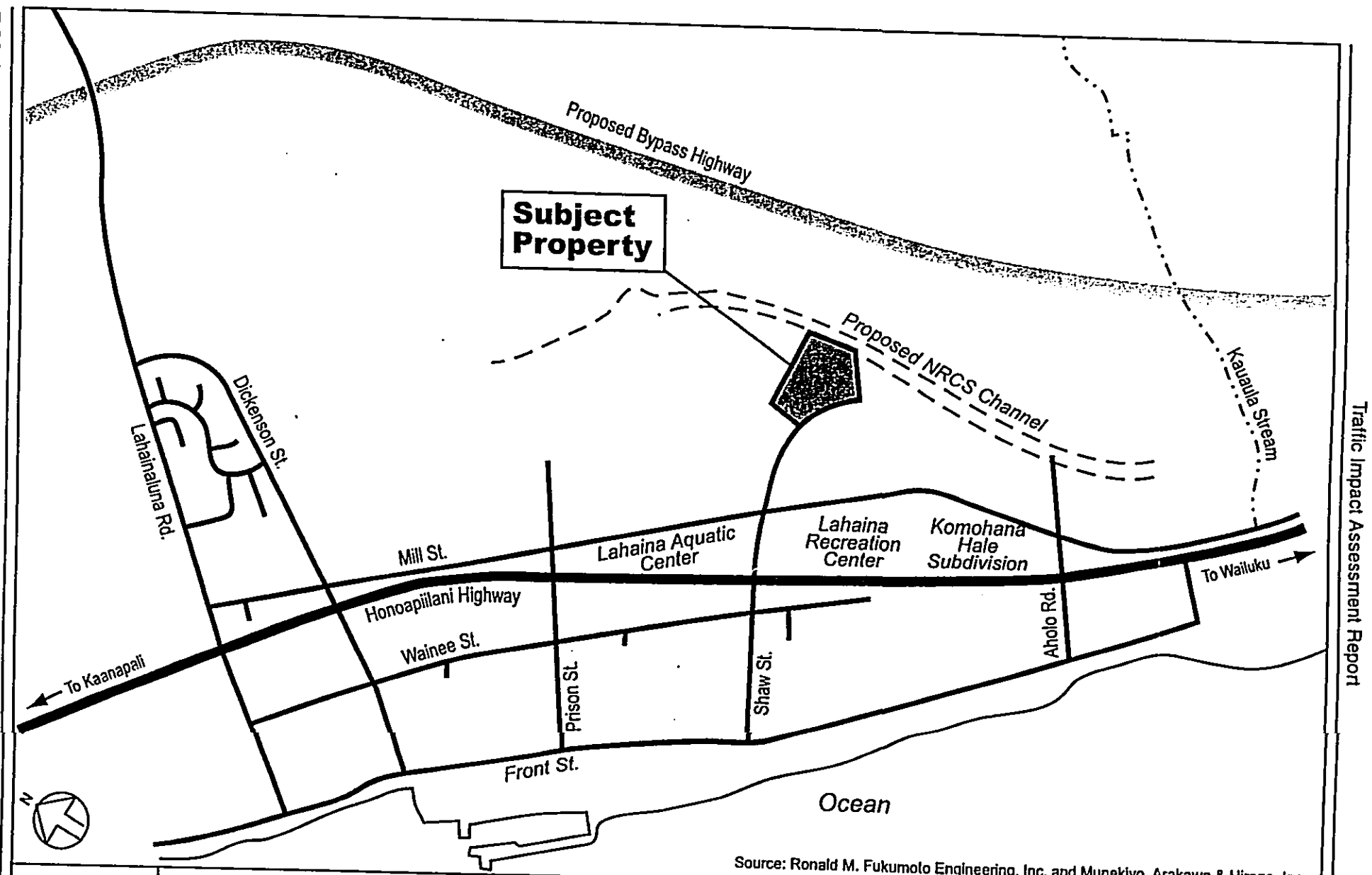
I. INTRODUCTION

Ka Hale O Ke Ola (Maui Economic Concerns of the Community), in partnership with the Maui County Department of Housing and Human Concerns (DHHC), proposes to develop the West Side Resource Center. The Center will consist of a homeless resource center and long-term affordable rental housing. A child day-care center serving the project's occupants may be provided should circumstances warrant.

The West Side Resource Center is proposed on a site located in the vicinity of the Lahaina Aquatic Center and the Lahaina Recreation Center. The West Side Resource Center site is located at the terminus of the proposed Shaw Street extension, and Shaw Street will be its access to Honoapiilani Highway. Figure 1 provides a vicinity map of the area, and Figure 2 provides a conceptual site plan .

The West Side Resource Center proposes to have a 15-passenger van that will help provide transportation for tenants that do not have an automobile. This is expected to reduce the number of vehicular trips generated by the Center.

This State of Hawaii Department of Transportation (SDOT) has requested that a traffic study be conducted that evaluates the impacts to the Honoapiilani Highway/Shaw Street intersection. This report documents the assumptions and methodology and summarizes the results and recommendations of this study.

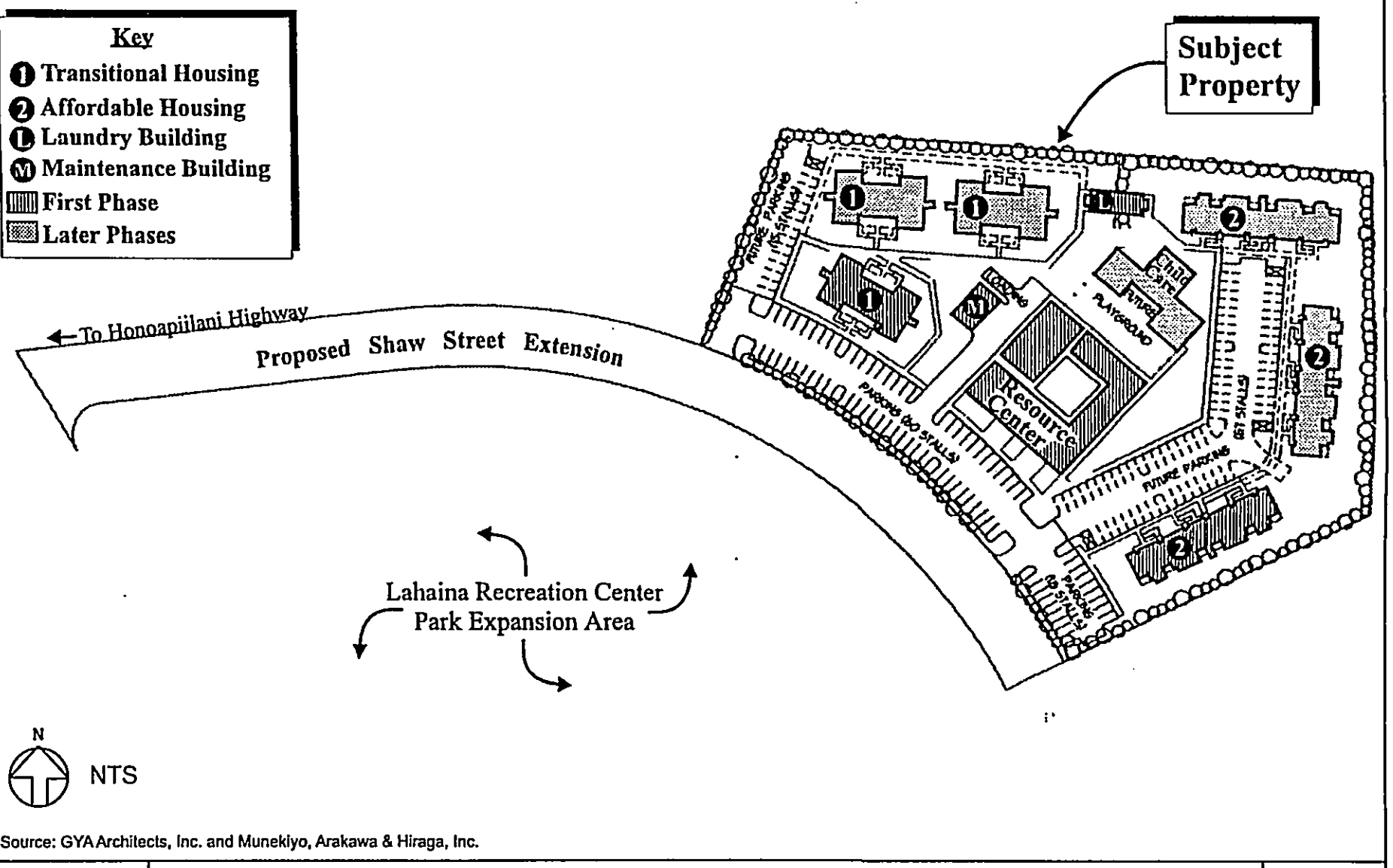


Source: Ronald M. Fukumoto Engineering, Inc. and Munekiyo, Arakawa & Hiraga, Inc.

PB 100 YEARS

PROJECT LOCATION MAP

Figure 1



Source: GYA Architects, Inc. and Munekiyo, Arakawa & Hiraga, Inc.

PB 100 YEARS

PRELIMINARY SITE PLAN

Figure 2

II. EXISTING CONDITIONS

A. EXISTING LAND USE

The proposed West Side Resource Center is located in Lahaina, near the existing Lahaina Aquatic Center and Lahaina Recreation Center.

The area surrounding the proposed development is primarily agricultural in use. There are plans to expand the Lahaina Recreation Center Park onto the lands surrounding the proposed West Side Resource Center, roughly doubling the amount of parkland. Land makai of Honoapiilani Highway is primarily residential, transitioning to tourist-support along Front Street.

B. EXISTING ROADWAY SYSTEM

Honoapiilani Highway provides regional mobility and north-south circulation for the West Maui area. In the vicinity of Shaw Street, it is a two-lane, arterial roadway with exclusive left-turn lanes at key intersections. Its intersection with Shaw Street is signalized.

Mauka of Honoapiilani Highway, Shaw Street provides access to Lahaina Aquatic Center and the Lahaina Recreation Center. Shaw Street terminates at the entrance to the existing agricultural lands.

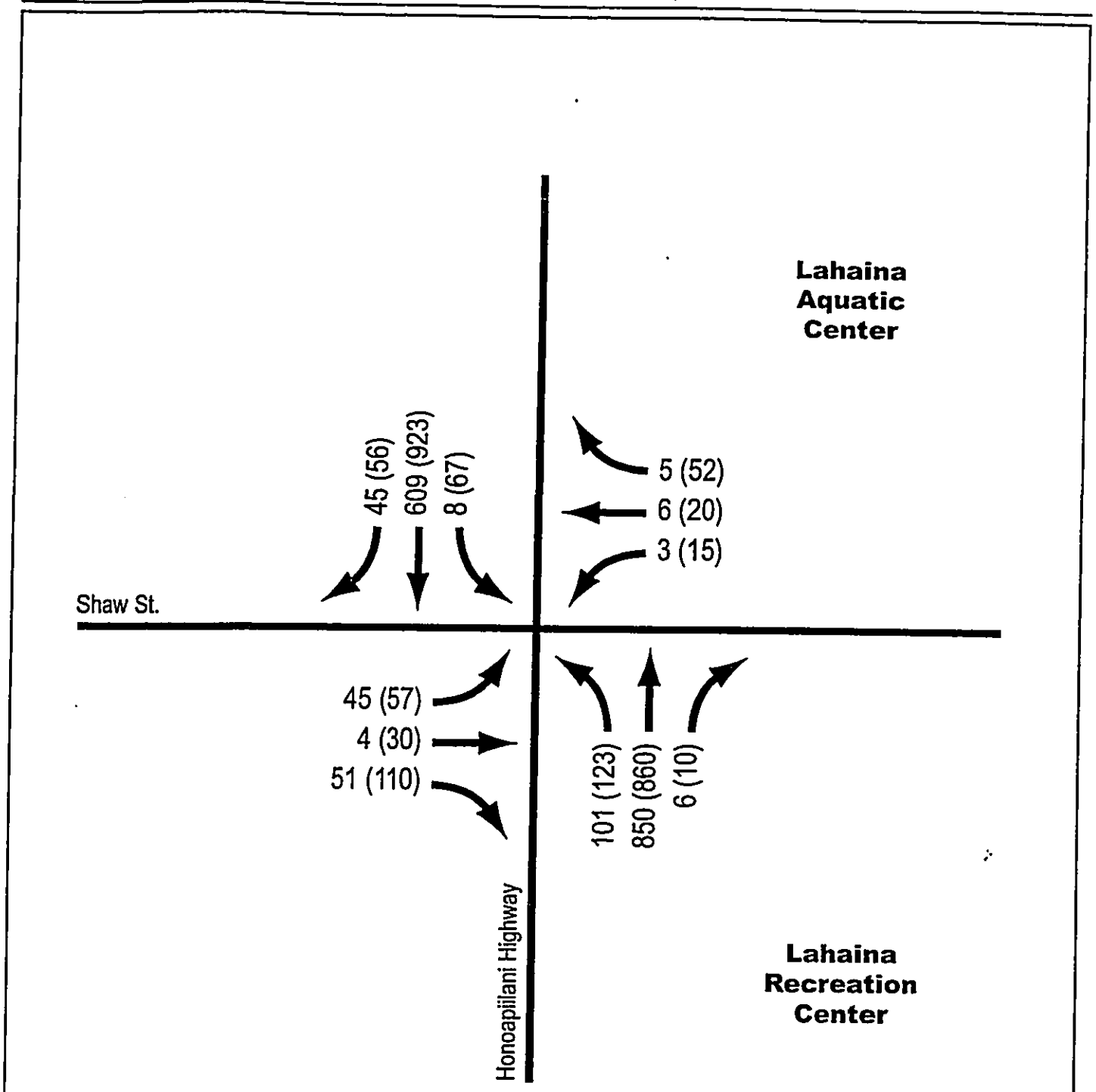
C. EXISTING TRAFFIC VOLUMES

Manual turning movement traffic counts were conducted during the morning peak hour on Tuesday, September 12, 2000, and during the afternoon peak hours on Thursday, September 14, 2000, at the intersections of Honoapiilani Highway and Shaw Street. The peak hours were found to occur between 7:00 and 8:00 AM during the morning and between 3:00 and 4:00 PM during the afternoon.

D. EXISTING INTERSECTION OPERATIONS

Intersection operations were evaluated at the Honoapiilani Highway/Shaw Street intersection. Methods documented in the 1994 Highway Capacity Manual with 1997 revisions were used. The resulting intersection levels of service (LOS) are summarized in Table 1. LOS is represented by a letter designation ranging from A to F. LOS A represents free-flow operating conditions, while LOS F represents congested conditions. More detailed Level-of-Service definitions are included in Appendix B.

As shown, the Shaw Street/Honoapiilani Highway intersection currently operates well during the peak traffic hours. There was some vehicle queuing from the Honoapiilani Highway/Dickenson intersection that extended back to the Shaw Street intersection but not through the Shaw Street intersection. These occurred sporadically in the heart of the peak and were not long duration events. It did not appear to affect the functioning of the Shaw Street intersection. The Shaw Street approaches operate at LOS D during the morning and LOS C during the afternoon peak hours. This LOS is related to the delay that vehicles on the Shaw Street approaches experience while waiting for the green indication. Most of the signal cycle length is provided for traffic on Honoapiilani Highway. Therefore, traffic arriving on the Shaw Street approach must wait, on the average, between 30 and 40 seconds for a green signal. This wait, taken as delay by the intersection capacity methodology, results in the approach being classified as operating at LOS D at times due to the wait experienced by left and through vehicles on the Shaw Street approaches. However, the vehicular demand for these movements are small. The left turns do not exceed 60 vehicles per hour (vph) and the through movements do not exceed 30 vehicles per hour. No significant queue forms on these approaches. Therefore, it is judged that the intersection is operating well.



Source: Parsons Brinckerhoff Quade & Douglas, Inc.
9/12/00 and 9/14/00
AM Peak Hour: 7:00- 8:00 am
PM Peak Hour: 3:00 - 4:00 pm

EXISTING PEAK HOUR TRAFFIC VOLUMES

Figure 3

Table 1 ***Existing Intersection Operations***

Honoapiilani Highway/Shaw Street Intersection

Intersection Approach	Approach Movement	Peak Hour Level of Service	
		AM	PM
Overall Intersection		**C**	**C**
Honoapiilani Highway Northbound	Approach	C	B
	Left	A	A
	Through/Right	C	B
Honoapiilani Highway Southbound	Approach	B	C
	Left	A	A
	Through/Right	B	C
Shaw Street Eastbound	Approach	D	C
	Left/Through	D	D
	Right	C	C
Shaw Street Westbound	Approach	D	C
	Left/Through	D	C
	Right	C	C

Note: AM=AM Peak Hour, PM=PM Peak Hour

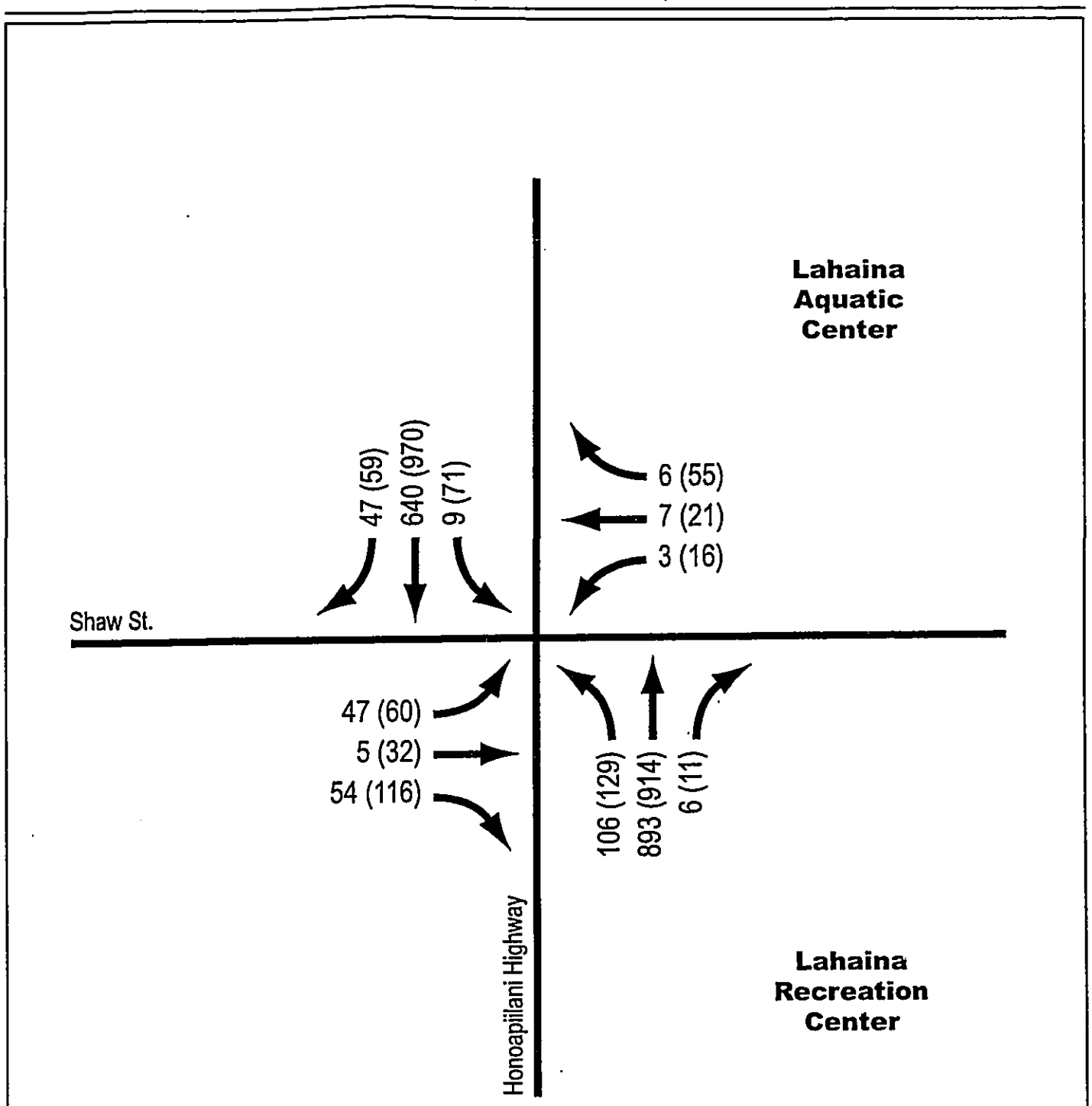
III. FUTURE TRAFFIC CONDITIONS

A. YEAR 2002 TRAFFIC WITHOUT WEST SIDE RESOURCE CENTER

The West Side Resource Center is expected to be constructed by 2002. Therefore, the Year 2002 traffic volumes without the West Side Resource Center were estimated for the Honoapiilani Highway/Shaw Street intersection as background traffic. Historical traffic volumes from the State of Hawaii Department of Transportation (SDOT) count station 25-C was used to identify the annual growth rate on Honoapiilani Highway. The long-term annual rate of growth in traffic between 1991 and 1997 was found to be approximately 1.5 percent. To be conservative and to account for future activity such as park expansion in this area, a higher annual rate of 2.5 percent was used to growth factor the existing traffic volumes at the Honoapiilani Highway/Shaw Street intersection to estimate future Year 2002 conditions without the West Side Resource Center. The Year 2002 background traffic volumes are summarized in Figure 4.

B. TRIP GENERATION OF WEST SIDE RESOURCE CENTER

Trip generation rates documented in the Institute of Transportation Engineers (ITE) publication, Trip Generation, Sixth Edition, were used to estimate the traffic volumes generated by the West Side Resource Center. Table 2 presents the number of vehicular trips generated at buildout.



Source: Parsons Brinckerhoff Quade & Douglas, Inc.
9/12/00 and 9/14/00
AM Peak Hour: 7:00- 8:00 am
PM Peak Hour: 3:00 - 4:00 pm

YEAR 2002 PEAK HOUR TRAFFIC VOLUMES WITHOUT WEST SIDE RESOURCE CENTER

Figure 4

Table 2 Trip Generation Summary

Development	ITE Code	Intensity	AM Peak Hour		PM Peak Hour	
			In	Out	In	Out
Emergency/Transitional Housing	311	90 beds	19	15	16	20
Affordable Rental Apartments	220	30 mfdu	3	15	23	12
Total			22	30	39	32

Traffic estimated using trip generation rates documented in Trip Generation, 6th edition.

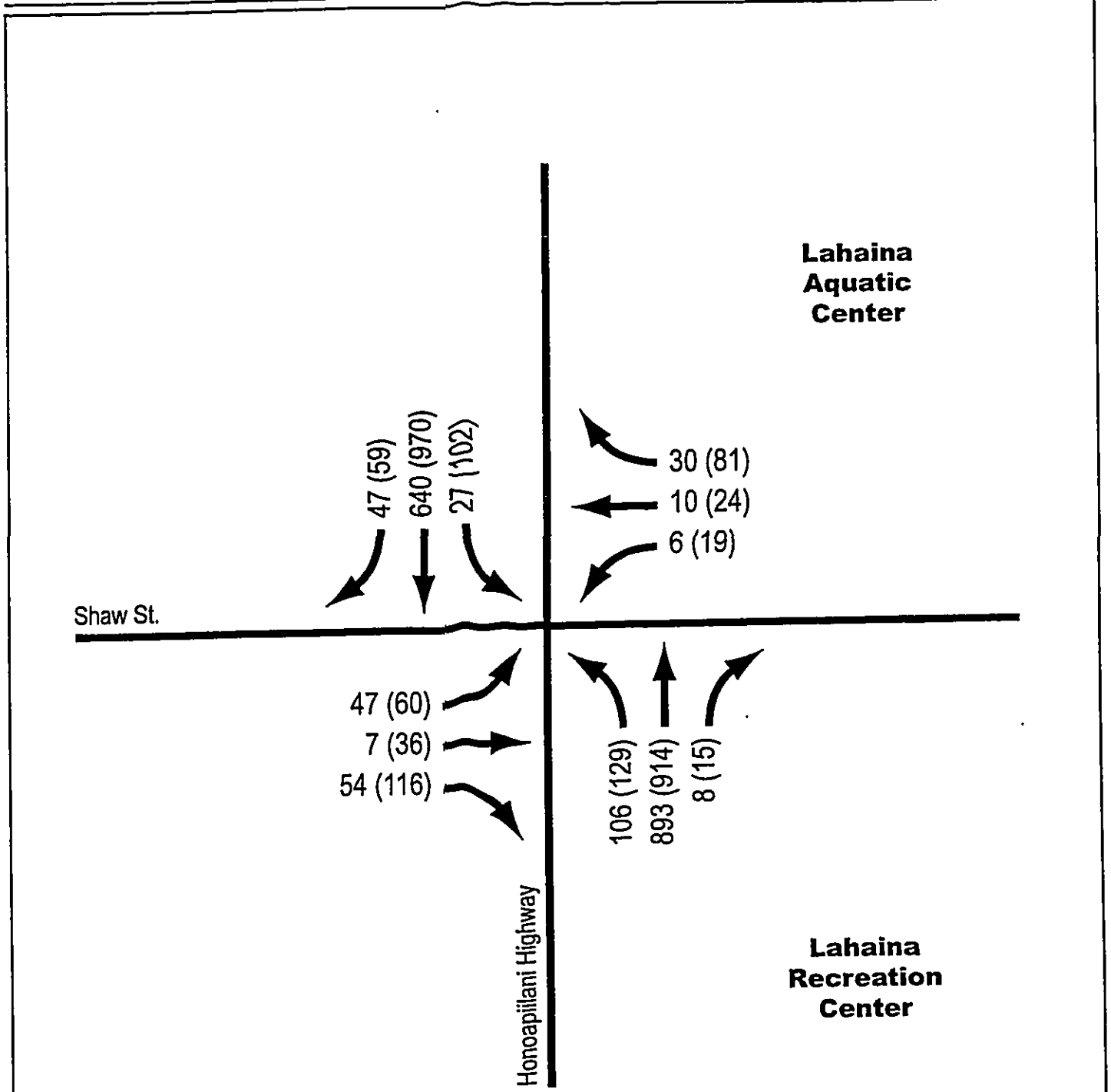
B. TRIP DISTRIBUTION AND ASSIGNMENT OF WEST SIDE RESOURCE CENTER TRAFFIC

The traffic generated by the proposed West Side Resource Center was directionally distributed based on existing traffic patterns for this area. The directional trip distribution factors assumed for this project were 80 percent to and from Honoapiilani Highway to the north, 10 percent to and from Honoapiilani Highway to the south, and 10 percent to and from Shaw Street to the west.

Traffic generated by the proposed development was then assigned to the turn movements at the Honoapiilani Highway/Shaw Street intersection and added to the background traffic volumes shown in Figure 4. The resulting Year 2002 traffic volumes with West Side Resource Center are shown in Figure 5.

D. INTERSECTION OPERATIONS ANALYSIS RESULTS

The Honoapiilani Highway/Shaw Street intersection was evaluated using the method for signalized intersections documented in the 1994 Highway Capacity Manual with 1997 Revisions. The worksheets for the intersection analyses are included in Appendix C of this study report. Projected Year 2002 traffic conditions without and with the proposed West Side Resource Center were evaluated.



Source: Parsons Brinckerhoff Quade & Douglas, Inc.
9/12/00 and 9/14/00
AM Peak Hour: 7:00- 8:00 am
PM Peak Hour: 3:00 - 4:00 pm

YEAR 2002 PEAK HOUR TRAFFIC VOLUMES WITH WEST SIDE RESOURCE CENTER

Figure 5

Table 3 summarizes the results of the intersection level of service (LOS) analysis without and with the proposed West Side Resource Center. Existing LOS is also shown as for comparative purposes. Level of service is a qualitative index based on quantitative analyses. It ranges from LOS A to LOS F with LOS indicating little or no delay and LOS F indicating congested conditions with significant delay. LOS A through D and sometimes LOS E are usually considered acceptable for peak hour conditions. More detailed definitions of LOS are included in Appendix B of this study report.

As shown in Table 3, the Honoapiilani Highway/Shaw Street intersection is projected to operate acceptably for peak hour conditions without or with the proposed West Side Resource Center. No change from existing condition LOS is projected.

Table 3 Summary of Peak Hour Intersection Level of Service
Honoapiilani Highway/Shaw Street Intersection

Intersection Approach	Approach Movement	Existing		Future without. Development		Future with. Development	
		AM	PM	AM	PM	AM	PM
Overall Intersection		C	C	C	C	C	C
Honoapiilani Highway Northbound	Approach Left Thru/Right	C A C	B A B	C A C	B A B	C A C	B A B
Honoapiilani Highway Southbound	Approach Left Thru/Right	B A B	C A C	B A B	C A C	B A B	C A C
Shaw Street Eastbound	Approach Left/Thru Right	D D C	C D C	D D C	C D C	D D C	C D C
Shaw Street Westbound	Approach Left/Thru Right	D D C	C C C	D D C	C C C	D D C	C C C

Note: AM=AM Peak Hour, PM=PM Peak Hour

There are slight increases in delay for traffic movements at this intersection, but they are not significant enough to affect the LOS designation. Most of the increases in delay are attributable to the background increase in traffic volume on Honoapiilani Highway. The results of the traffic forecast and analysis indicate that traffic generated by the proposed West Side Resource center will have only minor traffic impacts on the Honoapiilani Highway/Shaw Street intersection. The intersection is projected to operate well for projected peak hour conditions, without or with the proposed development.

IV. SUMMARY AND CONCLUSION

A. SUMMARY

Ka Hale O Ke Ola (Maui Economic Concerns of the Community), in partnership with the Maui County Department of Housing and Human Concerns (DHHC), proposes to develop the West Side Resource Center. The Center will consist of a homeless resource center and long-term affordable rental housing.

The West Side Resource Center is proposed on a site located in the vicinity of the Lahaina Aquatic Center and the Lahaina Recreation Center. The West Side Resource Center site is located at the terminus of the proposed Shaw Street extension, and Shaw Street will be its access to Honoapiilani Highway.

The results of the traffic forecast and analysis indicate that traffic generated by the proposed West Side Resource center will have only minor traffic impacts on the Honoapiilani Highway/Shaw Street intersection. The intersection is projected to operate well for projected peak hour conditions, without or with the proposed development.

B. RECOMMENDATIONS

Currently, Shaw Street, mauka of Honoapiilani Highway, provides access to the Lahaina Aquatic Center and the Lahaina Recreation Center. Shaw Street terminates at the entrance to the agricultural lands. At this location, the driveway to the Lahaina Recreation Center parking lot intersects Shaw Street from the south. At the same location, a driveway that leads to the overflow parking area for the Lahaina Aquatic Center intersects Shaw Street from the north.

As part of the proposed West Side Resource Center, Shaw Street will be extended mauka of this point into the current agricultural lands. When this occurs, it will effectively create a four-legged intersection with Shaw Street and the driveways from the north and the south. At this time, it is recommended to install STOP-sign control on all approaches to this newly formed four-legged intersection per Maui County standards. The installation of STOP-sign

control should be coordinated with and approved by the Maui County Department of Public Works and Waste Management (DPWWM) before implementation.

C. CONCLUSION

Due to the low estimated traffic volumes and the intersection analyses documented in this report, it is concluded that, with the recommendations included in this report, the surrounding roadways and the Honoapiilani Highway/Shaw Street intersection can accommodate traffic from the proposed West Side Resource Center.

APPENDIX

Appendix A Traffic Count Data

Parsons Brinckerhoff Quade and Douglas
1001 Bishop Street Suite 3000
Honolulu, HI 96813

Site Code : 00000000
Start Date: 09/12/00
File I.D. : SHAWAM
Page : 1

Movement 1

Start Time	HONOAPIILANI Southbound Rght	Thru	Left	SHAW Westbound Rght	Thru	Left	HONOAPIILANI Northbound Rght	Thru	Left	SHAW Eastbound Rght	Thru	Left	Total
7:00am	5	127	1	1	1	0	1	259	23	12	0	4	434
7:15	9	147	1	1	4	1	2	206	28	14	2	11	426
7:30	13	161	1	2	0	1	2	172	26	11	1	17	407
7:45	18	174	5	1	1	1	1	213	24	14	1	13	466
Hour Total	45	609	8	5	6	3	6	850	101	51	4	45	1733
8:00am	11	176	0	1	1	1	2	192	33	8	1	6	432
Total	11	176	0	1	1	1	2	192	33	8	1	6	432
Grand	56	785	8	6	7	4	8	1042	134	59	5	51	2165
% of Total	2.6%	36.3%	.4%	.3%	.3%	.2%	.4%	48.1%	6.2%	2.7%	.2%	2.4%	
Apprch %	39.2%			.8%			54.7%			5.3%			
% of Apprch	6.6%	92.5%	.9%	35.3%	41.2%	23.5%	.7%	88.0%	11.3%	51.3%	4.3%	44.3%	

Peak Hour Analysis By Entire Intersection for the Period: 07:00am to 08:00am on 09/12/00

Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes ..... Rght	Thru	Left	Total	..... Percentages ..... Rght	Thru	Left
Southbound	HONOAPIILANI	07:00am	.840	45	609	8	662	6.7	91.9	1.2
Westbound	SHAW		.583	5	6	3	14	35.7	42.8	21.4
Northbound	HONOAPIILANI		.845	6	850	101	957	.6	88.8	10.5
Eastbound	SHAW		.862	51	4	45	100	51.0	4.0	45.0

Parsons Brinckerhoff Quade and Douglas
1001 Bishop Street Suite 3000
Honolulu, HI 96813

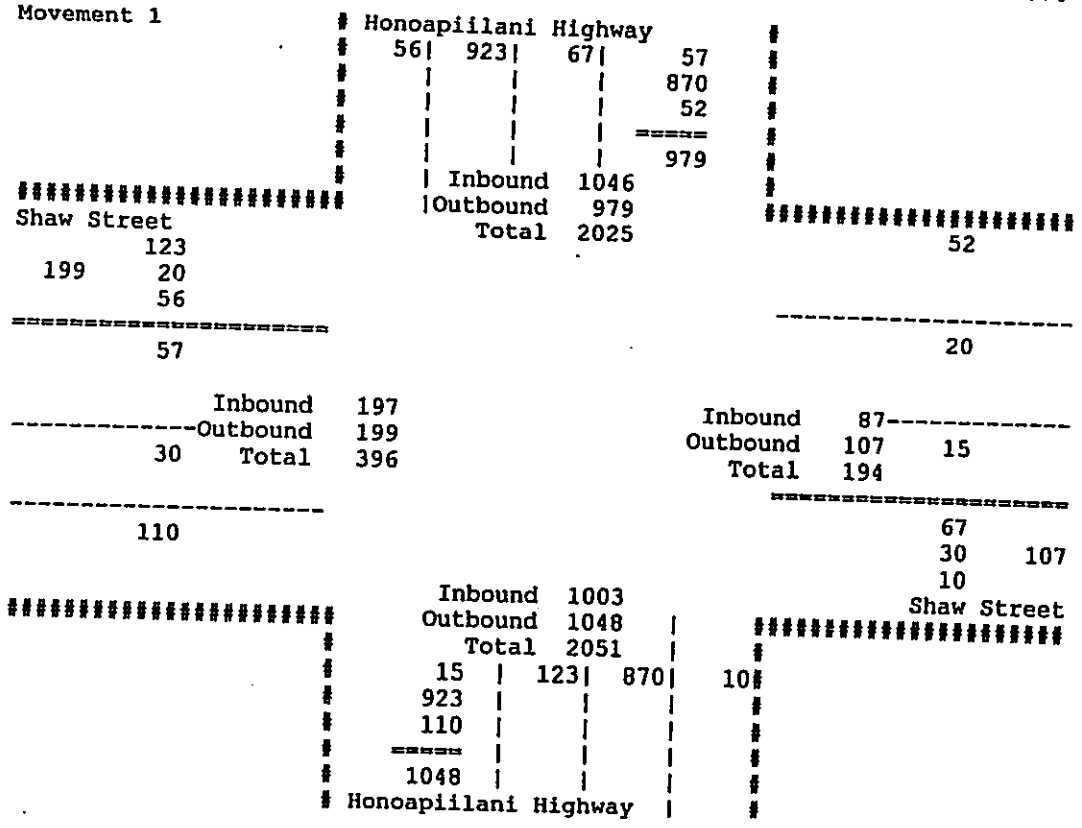
Site Code : 00000000
Start Date: 09/14/00
File I.D. : SHAWPM
Page : 1

Movement 1

Start Time	Honoapiilani Highway Southbound Rght	Thru	Left	Shaw Street Westbound Rght	Thru	Left
3:15	13	232	10	5	2	2
3:30	12	237	10	9	2	7
3:45	13	228	24	22	7	4
Total	38	697	44	36	11	13
4:00pm	18	226	23	16	9	2
Total	18	226	23	16	9	2
Grand	56	923	67	52	20	15
% of Total	2.4%	39.6%	2.9%	2.2%	.9%	.6%
Apprch %	44.8%			3.7%		
% of Apprch	5.4%	88.2%	6.4%	59.8%	23.0%	17.2%

Movement 1

Honoapiilani Highway Northbound Rght	Thru	Left	Shaw Street Eastbound Rght	Thru	Left	Total
3	221	39	22	5	7	561
2	218	32	25	10	17	581
4	222	28	26	11	17	606
9	661	99	73	26	41	1748
1	209	24	37	4	16	585
1	209	24	37	4	16	585
10	870	123	110	30	57	2333
.4%	37.3%	5.3%	4.7%	1.3%	2.4%	
43.0%			8.4%			
1.0%	86.7%	12.3%	55.8%	15.2%	28.9%	



Appendix B Levels of Service Definitions

The *Highway Capacity Manual* defines six Levels of Service (LOS), labeled A through F, from best to worst conditions. Levels of Service for signalized and unsignalized intersections are defined in terms of average user delays. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time.

For unsignalized intersections, the *Highway Capacity Manual* evaluates gaps in the major street traffic flow and calculates available gaps for left-turns across oncoming traffic and for the left and right-turns onto the major roadway from the minor street.

LEVEL-OF-SERVICE A: Little or no delay.

LEVEL-OF-SERVICE B: Short traffic delays.

LEVEL-OF-SERVICE C: Average traffic delays.

LEVEL-OF-SERVICE D: Long traffic delays.

LEVEL-OF-SERVICE E: Very long traffic delays.

LEVEL-OF-SERVICE F: Demand volume exceeds capacity, resulting in extreme delays with queuing that may cause severe congestion and affect other movements at the intersection.

Appendix C Intersection Capacity Analysis Worksheets

HCS: Signalized Intersections Release 3.1c

Inter: West Maui Homeless Center
Analyst: cey
Date: 9/13/2000
E/W St: Shaw Street

City/St: Lahaina, Maui, Hawaii
Proj #: 16340A
Period: AM Peak
N/S St: Honoapiilani Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	1	1	1	1	0	1	1	0
LGConfig		LT	R		LT	R	L	TR		L	TR	
Volume	45	4	51	3	6	5	101	850	6	8	609	45
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A							
	Thru	A							
	Right	A							
	Peds								
WB	Left	A							
	Thru	A							
	Right	A							
	Peds								
NB	Right								
SB	Right								
Green		23.0							
Yellow		3.0							
All Red		1.0							

NB	Left	A	A			
	Thru		A			
	Right		A			
	Peds					
SB	Left	A	A			
	Thru		A			
	Right		A			
	Peds					
EB	Right	A				
WB	Right	A				
		10.0	75.0			
		3.0	3.0			
		1.0	1.0			

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LT	280	1459	0.21	0.192	41.2	D	35.5	D
R	498	1615	0.12	0.308	29.9	C		
Westbound								
LT	344	1793	0.03	0.192	39.5	D	35.7	D
R	498	1615	0.01	0.308	28.8	C		
Northbound								
L	504		0.24	0.742	6.7	A		
TR	1186	1898	0.85	0.625	24.0	C	22.1	C
Southbound								
L	414		0.02	0.742	6.8	A		
TR	1175	1880	0.65	0.625	15.6	B	15.5	B

Intersection Delay = 20.5 (sec/veh) Intersection LOS = C

HCS: Signalized Intersections Release 3.1c

Inter: West Maui Homeless Center
Analyst: cey
Date: 9/13/2000
E/W St: Shaw Street

City/St: Lahaina, Maui, Hawaii
Proj #: 16340A
Period: PM Peak
N/S St: Honoapiilani Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	1	1	1	1	0	1	1	0
LGConfig		LT	R		LT	R	L	TR		L	TR	
Volume	57	30	110	15	20	52	123	870	10	67	923	56
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A							
	Thru	A							
	Right	A							
	Peds								
WB	Left	A							
	Thru	A							
	Right	A							
	Peds								
NB	Right					A	A		
SB	Right					A	A		
Green		13.0					8.0	57.0	
Yellow		3.0					3.0	3.0	
All Red		1.0					1.0	1.0	

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LT	214	1483	0.45	0.144	36.7	D	30.6	C
R	449	1615	0.27	0.278	25.7	C		
Westbound								
LT	234	1617	0.17	0.144	34.1	C	28.3	C
R	449	1615	0.13	0.278	24.5	C		
Northbound								
L	408		0.34	0.767	6.5	A		
TR	1201	1897	0.81	0.633	16.9	B	15.6	B
Southbound								
L	444		0.17	0.767	5.1	A		
TR	1193	1884	0.91	0.633	25.0	C	23.7	C

Intersection Delay = 21.0 (sec/veh) Intersection LOS = C

HCS: Signalized Intersections Release 3.1c

Inter: West Maui Homeless Center
Analyst: cey
Date: 9/13/2000
E/W St: Shaw Street

City/St: Lahaina, Maui, Hawaii
Proj #: 16340A
Period: AM Peak w/out Project
N/S St: Honoapiilani Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	1	1	1	1	0	1	1	0
LGConfig		LT	R		LT	R	L	TR		L	TR	
Volume	47	5	54	3	7	6	106	893	6	9	640	47
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A					A		
	Thru	A					A		
	Right	A					A		
	Peds								
WB	Left	A				A			
	Thru	A				A			
	Right	A				A			
	Peds								
NB	Right					A			
SB	Right					A			
Green		23.0				10.0	75.0		
Yellow		3.0				3.0	3.0		
All Red		1.0				1.0	1.0		

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LT	279	1458	0.22	0.192	41.3	D	35.5	D
R	498	1615	0.13	0.308	30.0	C		
Westbound								
LT	345	1800	0.03	0.192	39.5	D	35.6	D
R	498	1615	0.01	0.308	28.8	C		
Northbound								
L	488		0.26	0.742	6.9	A		
TR	1186	1898	0.89	0.625	27.9	C	25.7	C
Southbound								
L	398		0.03	0.742	7.0	A		
TR	1176	1881	0.69	0.625	16.5	B	16.4	B

Intersection Delay = 22.8 (sec/veh) Intersection LOS = C

HCS: Signalized Intersections Release 3.1c

Inter: West Maui Homeless Center
Analyst: cey
Date: 9/13/2000
E/W St: Shaw Street

City/St: Lahaina, Maui, Hawaii
Proj #: 16340A
Period: PM Peak w/out project
N/S St: Honoapiilani Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	1	1	1	1	0	1	1	0
LGConfig		LT	R		LT	R	L	TR		L	TR	
Volume	60	32	116	16	21	55	129	914	11	71	970	59
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A							
	Thru	A							
	Right	A							
	Peds								
WB	Left	A							
	Thru	A							
	Right	A							
	Peds								
NB	Right								
SB	Right								
Green		13.0							
Yellow		3.0							
All Red		1.0							

NB	Left	A	A				
	Thru		A				
	Right		A				
	Peds						
SB	Left	A	A				
	Thru		A				
	Right		A				
	Peds						
EB	Right	A					
WB	Right	A					
		8.0	57.0				
		3.0	3.0				
		1.0	1.0				

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LT	209	1449	0.49	0.144	37.3	D	30.9	C
R	449	1615	0.29	0.278	25.9	C		
Westbound								
LT	222	1537	0.18	0.144	34.2	C	28.4	C
R	449	1615	0.14	0.278	24.5	C		
Northbound								
L	392		0.36	0.767	7.0	A		
TR	1201	1897	0.86	0.633	19.5	B	18.0	B
Southbound								
L	427		0.19	0.767	5.4	A		
TR	1193	1884	0.96	0.633	32.5	C	30.8	C

Intersection Delay = 25.2 (sec/veh) Intersection LOS = C

HCS: Signalized Intersections Release 3.1c

Inter: West Maui Homeless Center
Analyst: cey
Date: 9/13/2000
E/W St: Shaw Street

City/St: Lahaina, Maui, Hawaii
Proj #: 16340A
Period: AM Peak w/Project
N/S St: Honoapiilani Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	1	1	1	1	0	1	1	0
LGConfig		LT	R		LT	R	L	TR		L	TR	
Volume	47	7	54	6	10	30	106	893	8	27	640	47
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A	A	
	Thru	A				Thru		A	
	Right	A				Right		A	
	Peds					Peds			
WB	Left	A				SB Left	A	A	
	Thru	A				Thru		A	
	Right	A				Right		A	
	Peds					Peds			
NB	Right					EB Right	A		
SB	Right					WB Right	A		
Green		23.0					10.0	75.0	
Yellow		3.0					3.0	3.0	
All Red		1.0					1.0	1.0	

Cycle Length: 120.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LT	280	1460	0.22	0.192	41.4	D	35.6	D
R	498	1615	0.13	0.308	30.0	C		
Westbound								
LT	339	1769	0.06	0.192	39.7	D	33.0	C
R	498	1615	0.07	0.308	29.4	C		
Northbound								
L	488		0.26	0.742	6.9	A		
TR	1186	1898	0.89	0.625	28.1	C	25.9	C
Southbound								
L	398		0.08	0.742	7.3	A		
TR	1176	1881	0.69	0.625	16.5	B	16.1	B

Intersection Delay = 22.9 (sec/veh) Intersection LOS = C

HCS: Signalized Intersections Release 3.1c

Inter: West Maui Homeless Center
Analyst: cey
Date: 9/13/2000
E/W St: Shaw Street

City/St: Lahaina, Maui, Hawaii
Proj #: 16340A
Period: PM Peak w/project
N/S St: Honoapiilani Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	1	0	1	1	1	1	0	1	1	0
LGConfig		LT	R		LT	R	L	TR		L	TR	
Volume	60	36	116	19	24	81	129	914	15	102	970	59
Lane Width		12.0	12.0		12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vol			0			0			0			0

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A	A	
	Thru	A				Thru		A	
	Right	A				Right		A	
	Peds					Peds			
WB	Left	A				SB Left	A	A	
	Thru	A				Thru		A	
	Right	A				Right		A	
	Peds					Peds			
NB	Right					EB Right	A		
SB	Right					WB Right	A		
Green		13.0					8.0	57.0	
Yellow		3.0					3.0	3.0	
All Red		1.0					1.0	1.0	

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
LT	201	1391	0.53	0.144	38.4	D	31.5	C
R	449	1615	0.29	0.278	25.9	C		
Westbound								
LT	209	1447	0.23	0.144	34.6	C	28.4	C
R	449	1615	0.20	0.278	25.1	C		
Northbound								
L	392		0.36	0.767	7.0	A		
TR	1200	1895	0.86	0.633	19.9	B	18.3	B
Southbound								
L	426		0.27	0.767	5.8	A		
TR	1193	1884	0.96	0.633	32.5	C	30.1	C

Intersection Delay = 25.2 (sec/veh) Intersection LOS = C

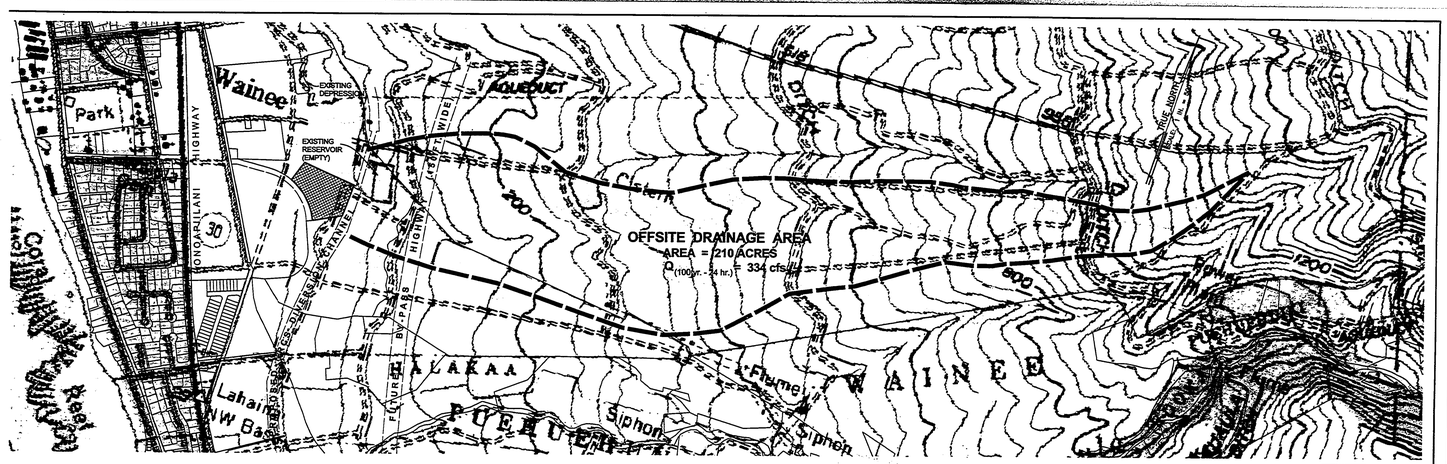


EXHIBIT 4 - OFFSITE DRAINAGE AREA

0 500 1000 1500 2000

SCALE: 1 IN. = 500 FT.

WARREN S. UNEMORI ENGINEERING, INC.

October 10, 2000

11"x17"

100 A

FIGURE 2

Final Environmental Assessment

(WEST SIDE RESOURCE CENTER)

Prepared for:

Ka Hale A Ke Ola

December 2000

MUNEKIYO, ARAKAWA & HIRAGA, INC.

Final Environmental Assessment

(WEST SIDE RESOURCE CENTER)

Prepared for:

Ka Hale A Ke Ola

December 2000

MUNEKIYO, ARAKAWA & HIRAGA, INC.

Final

Environmental Assessment

WEST SIDE RESOURCE CENTER

Prepared for:

Ka Hale A Ke Ola

December 2000

MUNEKIYO, ARAKAWA & HIRAGA, INC.

CONTENTS

LIST OF APPENDICES

LIST OF FIGURES

kahale\wmaui\finalea.rpt

Preface

In partnership with the Maui County Department of Housing and Human Concerns, the applicant, Maui Economic Concerns of the Community, Inc. (aka Ka Hale A Ke Ola), proposes the construction of the West Side Resource Center, a project consisting of a homeless resource center and long-term affordable rental housing. Identified by TMK 4-6-15:por. 01, the project site consists of 5.0 acres and is situated in Lahaina, Maui, Hawaii. Development of the project will be implemented through Section 201G-118, Hawaii Revised Statutes (HRS).

Pursuant to Chapter 343, HRS, and Chapter 200 of Title 11, Department of Health Administrative Rules, Environmental Impact Statement Rules, and 24 CFR Part 58, U.S. Department of Housing and Urban Development (HUD), Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities, this Environmental Assessment documents the project's technical characteristics, environmental impacts and alternatives, and advances findings and conclusions relative to the significance of the project.

Chapter I

Project Overview

I. PROJECT OVERVIEW

A. PROJECT LOCATION, EXISTING USE, AND LAND OWNERSHIP

In partnership with the Maui County Department of Housing and Human Concerns (DHHC), the applicant, Maui Economic Concerns of the Community, Inc. (aka Ka Hale A Ke Ola), proposes to develop the West Side Resource Center, a project consisting of a homeless resource center and long-term affordable rental housing.

The project site encompasses an area of 5.0 acres and is located in Lahaina, Maui, Hawaii. See Figure 1 and Figure 2. Identified by TMK 4-6-15:por. 01, the site is presently undeveloped and occupied by scrub vegetation and scattered trees. The subject property is located to the east of Shaw Street, a County roadway located in the vicinity of the West Maui Youth Center and the Lahaina Aquatic Center. A portion of the lands comprising the subject property was formerly utilized for sugar cane cultivation, while the remaining lands include a portion of the site previously occupied by Wainee Village, a former plantation camp that was developed in the early 1900's.

The subject property is located within the limits of the State Land Use Commission's Agricultural District. In addition, the property is zoned for Agricultural District uses by the County of Maui and is designated for Agriculture and Single-Family Residential uses by the West Maui Community Plan.

Pioneer Mill Company, Ltd. is the fee simple owner of the subject property. Pioneer Mill will subdivide the subject parcel for conveyance to the County of Maui. The County of Maui will, in turn, lease the property to Ka Hale A Ke Ola for a term of 55 years.

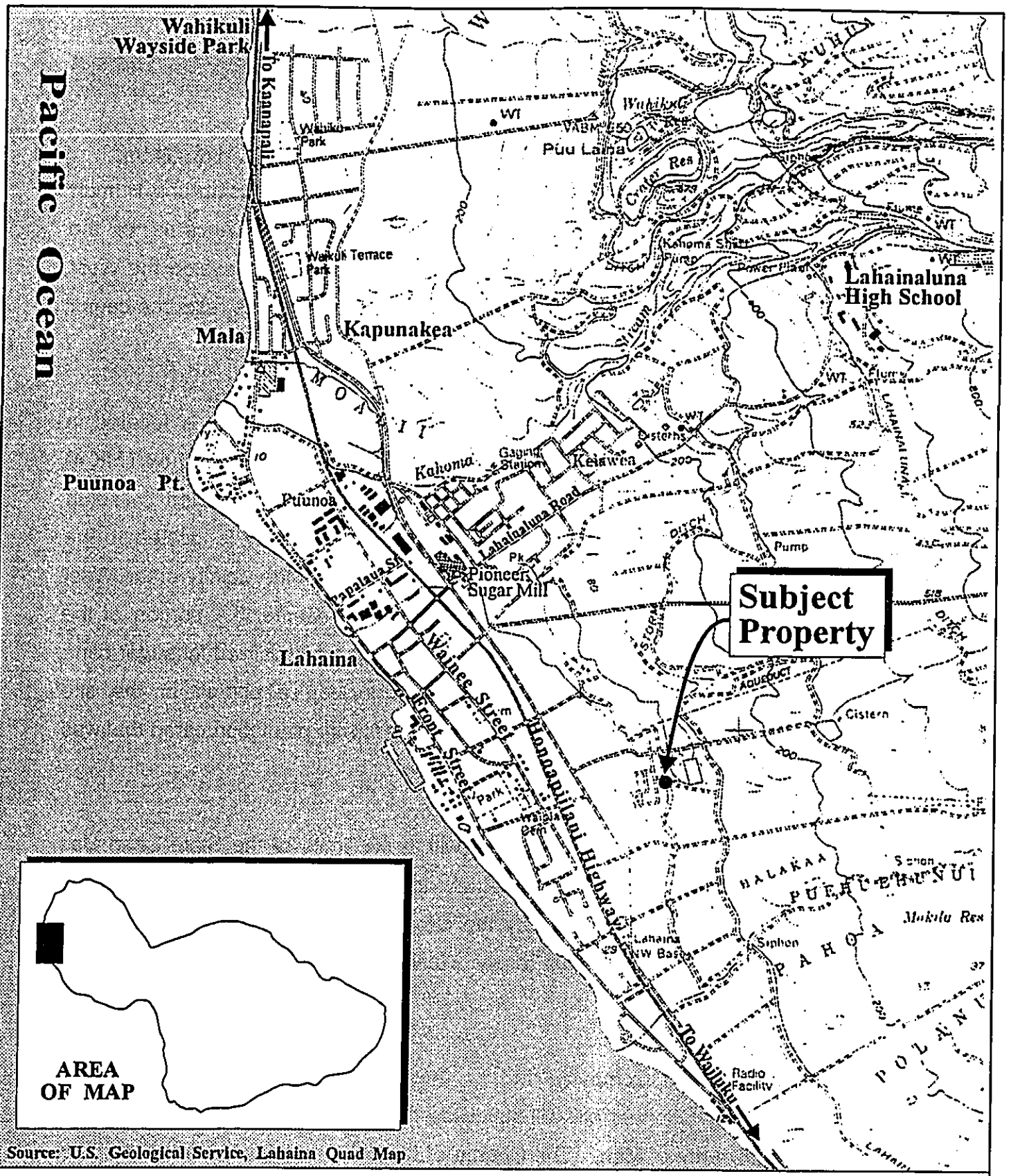


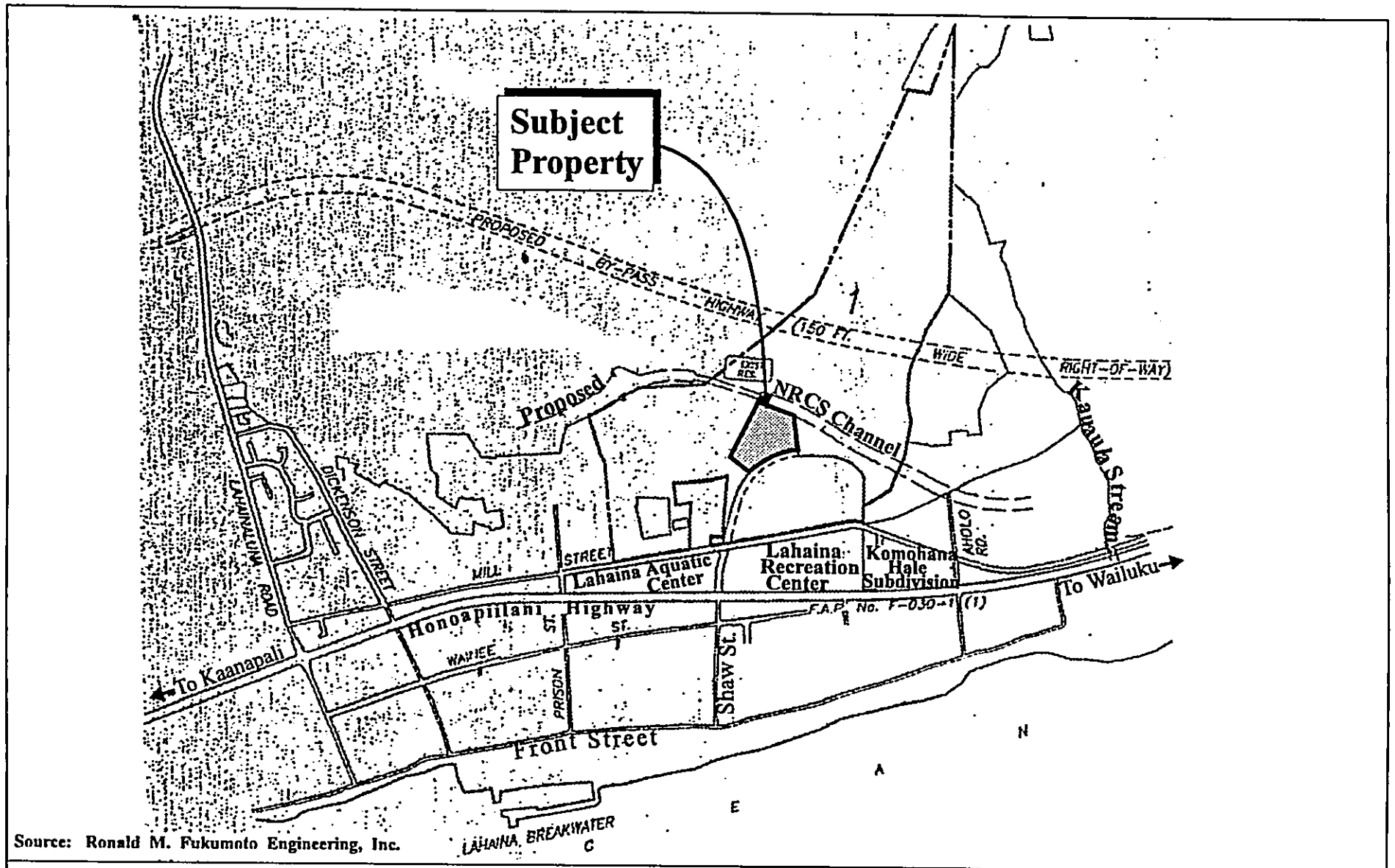
Figure 1 West Maui Homeless Resource Center

Regional Location Map

0 500 1000 2000

Prepared for: Ka Hale A Ke Ola

MUNEKIYO, ARAKAWA & HIRAGA, INC.



Source: Ronald M. Fukumoto Engineering, Inc.

Figure 2

West Side Resource Center
Project Location Map

NOT TO SCALE

Prepared for: Ka Hale A Ke Ola

MUNEKIYO, ARAKAWA & HIRABA, INC.

B. *PROJECT NEED*

Ka Hale A Ke Ola has been providing services to the homeless and low-income residents of the island of Maui since 1986. Its Homeless Resource Center and Hale Makana O Waiale affordable rental housing project in Wailuku provide Continuum of Care Systems that include outreach/assessment, emergency/transitional shelter, and permanent housing as well as support services and programs. For example, the Center currently provides a six-week emergency shelter program and a two-year (maximum) transitional housing program, while the adjoining affordable rental housing project provides 200 apartment units to residents earning less than 50 percent of the median family income for the island of Maui. Support services and programs include child care and primary health care services, as well as substance abuse, literacy, GED preparation, and job training programs.

Currently, there is a need in West Maui for systems that provide a continuum of care. As noted in the State of Hawaii's description for Continuum of Care Systems, " . . . It has been recognized and accepted that programs designed to assist homeless persons are more effective and efficient when carried out through carefully planned and systematic approaches, otherwise known as Continuum of Care Systems".

West Maui (aka West Side) encompasses a geographic region extending from Papawai Point on the south to Po'elua Bay to the north and includes the communities of Olowalu, Lahaina, Kaanapali, Honokowai, Mahinahina, Kahana, Alaeloa, Napili, Kapalua, and Honokohau.

An obstacle faced by the West Side's homeless and low-income population is that the majority of social service agencies are located in Wailuku-Kahului, approximately 20 miles from the town of Lahaina. While

Maui Economic Opportunity, Inc. provides public transportation between Wailuku-Kahului and outlying areas (Haiku, Hana, Kihei, Upcountry, and West Maui) on a twice a week basis, the absence of a widespread public transportation system limits access to the social service agencies that can best serve West Maui's homeless and low-income residents.

Agencies providing services to these groups have noted that single males comprise the majority of the homeless population and that the homeless population in the West Side may have a higher percentage of substance abusers than the homeless residents that have historically been served by Ka Hale A Ke Ola (25 to 37 percent of the adult homeless population).

It should be noted that the Federal Welfare Reform Act of 1996 established a maximum welfare benefit period of 60 months and requires each State to reduce a recipient's welfare benefit by 20 percent per year beginning in 1997. Insofar as West Maui is concerned, estimates by the applicant indicate that approximately 300 households rely on Aid for Dependent Children (AFDC) and a large number of individuals and families could be impacted by the loss of welfare benefits when the 60 month welfare benefit period expires in November 2001.

Utilizing the profile of the homeless population that is served by Ka Hale A Ke Ola, many of the households that will be losing their welfare benefits in November 2001 will require remedial education (math and literacy), job training, and child day care.

In light of the foregoing, Ka Hale A Ke Ola and the County of Maui, Department of Housing and Human Concerns envisions that the proposed West Side Resource Center will provide Continuum of Care Systems that address the needs of the homeless and low income residents of the

region.

C. *PROPOSED DEVELOPMENT*

The proposed project will involve the phased development of a resource center and long-term affordable rental housing for homeless and low-income residents of West Maui. See Figure 3 and Appendix A, Preliminary Development Plans.

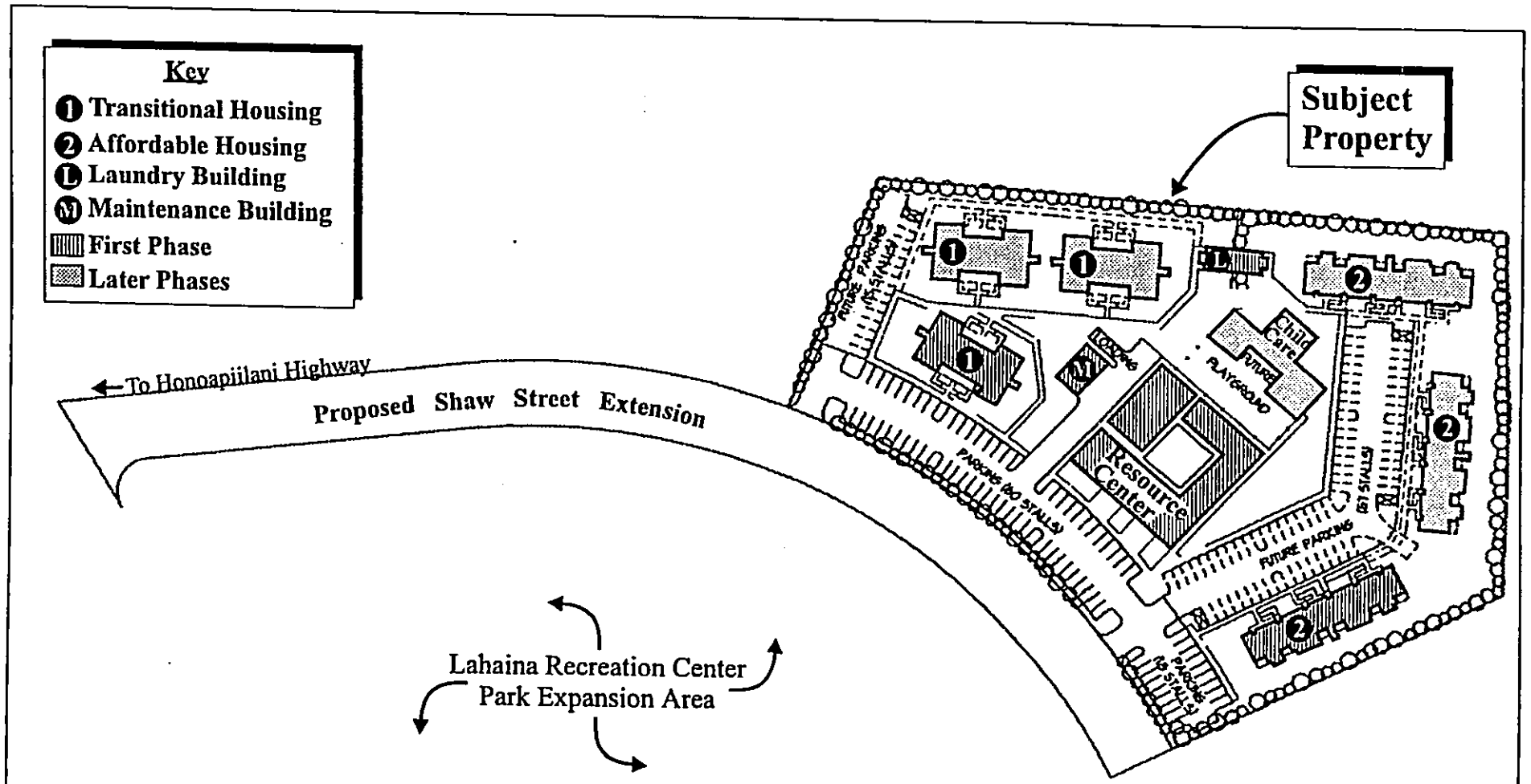
Key elements of the project's initial development phase will include the following:

1. A one-story resource center building with office, kitchen, dining, bathroom, classroom, storage, security, and meeting/conference facilities as well as 42 dormitory beds for emergency housing.

2. A two-story building consisting of eight (8) studios and eight (8) two-bedroom apartment units for emergency/transitional housing.

3. A two-story building including ten (10) two-bedroom apartment units for long-term affordable rental housing.

In addition to laundry and maintenance buildings, drainage, roadway, parking, and landscaping improvements are also proposed for the first phase, as well as the installation of utility lines for water, sewer, electrical, telephone, solar heating, and cable television services. Common area facilities and first floor housing units will be handicapped accessible and equipped. Security for the project will be provided on a continuous basis by Ka Hale A Ke Ola. In order to minimize project-related traffic, Ka Hale A Ke Ola intends to purchase a 15 passenger van to be used for transporting referrals and residents to and from the West Side Resource Center. Access to the project will be provided by extending Shaw Street, a County roadway that provides access to the Lahaina Aquatic Center, Lahaina Recreation Center, and West Maui Youth Center.



Source: GYA Architects, Inc.

Figure 3

West Side Resource Center
Preliminary Site Plan

NOT TO SCALE

Prepared for: Ka Hale A Ke Ola

MUNEKIYO, ARAKAWA & HIRAGA, INC.

Future phases of the project, which will be subject to the availability of funding, are intended to provide an additional 16 studio and 16 two-bedroom apartment units for transitional housing, as well as 20 more two-bedroom apartment units for long-term affordable rental housing. In addition, a child day care center will be provided should circumstances warrant. Attendant parking, landscaping, and infrastructure (utilities) improvements will be implemented during these later phases as well.

Upon full build-out, facilities provided by the proposed project will include the following:

1. ***Emergency/transitional housing and support facilities.***
   A resource center building with approximately 11,000 square feet of floor area containing a total of 42 dormitory beds and ancillary facilities, as well as separate buildings containing a total of 48 studio and two-bedroom apartment units. Each studio and two-bedroom unit will contain approximately 270 square feet and 455 square feet of floor area, respectively, as well as solar water heaters (with electricity backup).

2. ***Long-term affordable rental housing.***
   A total of 30 two-bedroom apartment units will be provided. Each two-bedroom unit will consist of 455 square feet of floor area. Including water, solar water heaters (with electricity backup), and trash collection fees, the rent for a two-bedroom unit is projected to be about $550.00 per month.

D. *ENVIRONMENTAL REVIEW*

Since a portion of the project site may be located within the Lahaina National Historic Landmark District and because the proposed project will involve County lands as well as State and Federal funding (HUD, HOME, USDA, Rental Housing Trust Fund), an Environmental Assessment (EA), has been prepared as required by Chapter 343, Hawaii Revised Statutes (HRS), and Chapter 200 of Title 11, Department of Health Administrative Rules, Environmental Impact Statement Rules, and 24 CFR Part 58, U.S. Department of Housing and Urban Development (HUD), Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities.

E. *PROJECT IMPLEMENTATION*

The development of the proposed project will be implemented through Section 201G-118, HRS as coordinated with the County of Maui, Department of Housing and Human Concerns. Accordingly, exemptions from certain regulatory and statutory requirements relating to zoning, construction, subdivision, public services, and administrative procedures are being requested. See Appendix B, Proposed Section 201G-118 Exemptions.

In accordance with Section 201G-118, HRS, the project application will be submitted for legislative review by the Maui County Council. Upon its receipt, the County Council will have 45 days to approve or disapprove the application. If the project application is not approved by the 46th day, it shall then be deemed approved by the County Council. The project application is expected to be submitted to the County Council in January 2001.

The estimated cost of the initial phase of the project is approximately $3.5

million. The development of the project is anticipated to occur in phases with construction of the initial phase expected to commence in early 2001. As previously indicated, the construction of subsequent phases will be contingent on the availability of funding.

Chapter II

Description of the Existing Environment

II. DESCRIPTION OF THE EXISTING ENVIRONMENT

A. PHYSICAL SETTING

1. Surrounding Uses

The subject property adjoins former residential and agricultural land uses. To the north of the property lies the former Wainee Village site, a plantation camp whose last remaining structures were demolished in late 1999. Situated to the northeast of the project site is the Wainee Reservoir, while adjoining the site to the east is the future Lahaina Watershed floodwater diversion channel which will be implemented by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), the West Maui Soil and Water Conservation District, and the County of Maui. To the south, as well as beyond the future NRCS channel on the east, lie abandoned agricultural lands which were previously utilized for sugar cane cultivation. To the west of the site, Amfac/JMB Hawaii is currently developing a 13.0-acre park which, when dedicated to the County of Maui, will expand the area of the existing Lahaina Recreation Center.

In addition to the Lahaina Recreation Center, the Lahaina Aquatic Center and the West Maui Youth Center reflect existing land uses in proximity of the project site. The Komohana Hale Subdivision, located to the south of the Lahaina Recreation Center, and single-family residential properties situated to the west of Honoapiilani Highway, characterize other land uses within the vicinity of the site.

2. Climate

Like most areas of Hawaii, West Maui's climate is relatively uniform year-round. The region's tropical latitude, its position relative to storm tracts and the Pacific anticyclone, and the surrounding ocean

combine to produce this stable climate. Variations in climate among different regions, then, is largely left to local terrain.

In Lahaina, August is historically the warmest month with an average high temperature of approximately 88 degrees Fahrenheit and average low temperature of 70 degrees Fahrenheit. January is normally the coolest month of the year with an average high temperature of 80 degrees Fahrenheit and an average low temperature of approximately 62 degrees Fahrenheit.

Rainfall at Lahaina is highly seasonal, with most precipitation occurring from November to April when winter storms hit the area. Precipitation data for 1997 shows that on average, January was the wettest month, with 10.01 inches of rainfall, while May, August, September, and October were the driest with no rainfall at all. Total precipitation for the year was 16.68 inches, and average monthly rainfall was 1.39 inches (Maui County Data Book, 2000).

The winds in the region are also seasonal. The northeasterly tradewind occurs 90 percent of the time during the summer, and just 50 percent of the time in the winter. Wind patterns also vary on a daily basis, with tradewinds generally being stronger in the afternoon. During the day, winds blow onshore toward the warmer land mass. In the evening, the reverse occurs, as breezes blow toward the relatively warm ocean.

3. ***Topography and Soils***

The subject property is characterized by gently sloping topography and generally slopes in an easterly to westerly direction. Onsite elevations range from about 65 feet above mean sea level (amsl)

at its eastern boundary to approximately 35 feet amsl at its western extent.

At a regional scale, the topography of West Maui ranges from the gently sloping coastal areas to steep ridges and large amphitheater valleys. The maximum elevation of the West Maui Mountains is 5,788 feet at Puu Kukui.

Underlying the project site and surrounding area are soils of the Waiakoa-Keahua Molokai association. This soil association is found on low uplands and consists of well-drained soils that have a moderately fine textured subsoil. The soil type specific to the site is Wainee very stony silty clay, 3 to 7 percent slope (WxB). This soil is characterized by slow runoff and slight erosion hazard.

In 1977, the State Department of Agriculture established a classification system for identifying Agricultural Lands of Importance to the State of Hawaii (ALISH), primarily, but not exclusively, on the basis of soil characteristics. The three (3) classes of ALISH lands are: "prime", "unique", and "other". As reflected by the ALISH map for the Lahaina area, a portion of the project site lies within the limits of the "other" agricultural land category, while the remaining portion of the site falls within the borders of the former Wainee Village.

4. ***Flood and Tsunami Hazard***

As indicated by the Flood Insurance Rate Map (FIRM) for the Lahaina area, the subject property is situated within Zone C, an area of minimal flooding (FIRM Community Panel No. 150003/0163B, June 1, 1981). At its closest point, the property is

located approximately 2,500 feet away from the shoreline, beyond the limits of tsunami inundation.

5. ***Flora and Fauna***

A portion of the subject property was utilized for sugar cane cultivation until Pioneer Mill Company, Ltd. terminated its sugar operations in September 1999. The remaining portion of the property encompasses the site of the former Wainee Village, a plantation camp whose last remaining structures were demolished in October 1999. Since then, introduced species of grasses, weeds, shrubs, and trees have occupied the site.

The region's wildlife include a host of introduced species, including the Japanese White-eye, Zebra Dove, Spotted Dove, and Common Myna. Other mammals common to this region include rats, mice, and mongoose. The project site is not considered a significant habitat for avifauna or wildlife. In addition, the U.S. Department of the Interior's National Wetlands Inventory map does not reveal any streams or wetlands located within or in close proximity to the subject property.

6. ***Archaeological Resources***

As previously indicated, a portion of the subject property was formerly utilized for growing sugar cane, while the remaining portion of the property is situated within the limits of the former Wainee Village. A part of the Wainee Village portion of the property may be located within the limits of the Lahaina National Historic Landmark District, an area listed on the National Register of Historic Places.

An archaeological inventory survey of the subject property was conducted in October 2000. See Appendix C. The survey was undertaken in two (2) phases. The first phase involved a pedestrian surface survey and a series of subsurface tests using a backhoe, while the second phase consisted of subsurface investigation and feature inspection.

The pedestrian portion of the inventory located one previously unrecorded site (Site 5042). This site consists of two (2) surface features, Feature A and Feature B, that are structural remnants of the former Wainee Village.

Feature A is a free-standing, core-filled rock wall that appears to have been associated with one or more former plantation homes. Feature B consists of a rock retaining wall which is probably associated with a former camp home.

Subsurface testing consisted of ten (10) backhoe trenches. The results of this testing indicated that the project area has been heavily impacted by land altering activities, including sugar cane cultivation and the construction and demolition of Wainee Village. Material culture remains consisted primarily of debris generated from the demolition of the camp as well as plantation-era items. No recognizable pre-contact cultural materials were found during the subsurface work.

The inventory survey also notes that while Land Commission Award data indicated that portions of the subject property had contained taro lo'i, there was no identifiable subsurface evidence of taro cultivation. The lack of any pre-contact cultural remnants

was consistent with predictions of findings since post-contact sugar cane cultivation, followed by the construction of Wainee Village, altered both the surface and subsurface nature of the project area. The features that were found in the project area are walls associated with the former plantation camp, and are the only remaining surface features following the demolition of the camp in late 1999.

7. ***Air Quality***

The Lahaina region is not exposed to adverse air quality conditions. There are no point sources of airborne emissions in the immediate vicinity and the air quality at the property is considered good. Motor vehicles are also a primary source of indirect emissions in the region.

8. ***Noise Characteristics***

There are no significant fixed noise generators in the vicinity of the project site. Existing background noise in the project area is attributable to vehicles travelling along Honoapiilani Highway as well as vehicles on Shaw Street proceeding to or from the Lahaina Aquatic Center, West Maui Youth Center, or Lahaina Recreation Center. Noise from drivers starting and warming up their vehicles in the parking lots of these facilities also contribute to background noise levels.

In the context of spatial relationships, at its closest point, the project site is situated about 700 feet to the east of the Lahaina Aquatic Center, West Maui Youth Center, and Lahaina Recreation Center, and approximately 1,060 feet to the east of Honoapiilani Highway. Noise generated by these existing facilities are

considered normal and acceptable for such activities and do not adversely affect surrounding land uses. In addition, the flight paths of arriving and departing aircraft at the Kapalua West Maui Airport, located about 6.5 miles to the north of the project site, place the site beyond the limits of aircraft noise exposure.

9. *Scenic Resources*

The subject property is not located within a scenic view corridor. Elevations on the property range from about 65 feet amsl at its eastern boundary to approximately 35 feet amsl along its western extent. The West Maui Mountains are visible to the east of the project site, while the town of Lahaina, the Pacific Ocean, and the offshore island of Lanai, are visible to the west of the site.

B. *COMMUNITY SETTING*

1. *Land Use and Community Character*

The vast majority of lands in West Maui are either State designated "Conservation" or "Agricultural". Generally, "Conservation" lands occupy the higher elevations, while the "Agricultural" district spans the middle ground. Major exceptions to this trend are the Honolua Stream and Pohakupule Gulch areas where the "Conservation" district extends down to sea level.

"Urban" designated lands, then, are left to occupy the lower elevations along the coast. Kapalua and Kaanapali contain Community Plan designations reflective of their resort nature. The communities of Kahana and Napili contain a mixture of resort, residential and business uses. Lahaina, meanwhile, encompasses a diverse mix of land uses, including residential, business, light industrial, recreational and agricultural uses.

The town of Lahaina is the commercial center for West Maui. The town contains several shopping centers and retail business areas, and serves as a hub for the region's residential housing.

West Maui's attraction can be attributed to its year-round dry and warm climate, complemented by many white-sand beaches and scenic landscape. Visitor accommodations are located in Lahaina and the resort communities of Kaanapali, Kahana, Napili, and Kapalua. The State of Hawaii's Kapalua-West Maui Airport at Mahinahina links the region to Oahu and other neighbor islands.

Diversified agriculture and pineapple fields occupy much of the land in the area. Pioneer Mill Company, Ltd. and its sister company, Kaanapali Estate Coffee, Inc., cultivate their agricultural lands in the Kaanapali area with coffee, sweet corn, seed corn, and alfalfa. Maui Land & Pineapple Company's fields sprawl along the slopes of the West Maui Mountains north of Lahaina.

2. ***Population***

Just as the visitor count has grown, the resident population of the region surrounding the project site has increased in the last two decades. Population gains were especially pronounced in the 1970s as the developing visitor industry attracted many new residents. According to the 1990 Census of Population and Housing, resident population of the Lahaina District was 14,574. A projection of the resident population for the year 2010 is 21,149 (West Maui Community Plan, 1996).

Growth patterns at the County level exhibit a similar pattern. The County's 1980 resident population of 71,000 has since grown to

just over 100,000. The estimated County population for the year 2010 is 140,060 (Community Resources, Inc., 1994).

3. *Economy*

The economy of Maui is heavily dependent upon the visitor industry. The dependency on the visitor industry is especially evident in West Maui, which is one of the State's major resort destination areas.

Agriculture, another vital component of the West Maui economy, is handled by Pioneer Mill Company, Ltd. and Maui Land & Pineapple Company, Inc. Until the closure of sugar cane cultivation in September 1999, Pioneer Mill cultivated most of its approximately 6,700 acres of fee simple and leased lands with sugar cane. Pioneer Mill is currently in the process of diversifying its agricultural operations by utilizing portions of its lands for sweet corn, seed corn, and alfalfa cultivation. Its sister company, Kaanapali Estate Coffee, presently cultivates about 500 acres in coffee.

Maui Land & Pineapple's fields remain an important component of the region's agricultural base. In 1988, Maui Land & Pineapple entered the fresh fruit market, air shipping pineapples to the mainland in an effort to diversify its operations.

As of June 2000, the unemployment rate for Maui County and the island of Maui stood at 4.2 percent and 3.8 percent, respectively (State Department of Labor and Industrial Relations, June 2000).

4. *Police and Fire Protection*

The project site is within the Lahaina Police Station service area,

which services all of the Lahaina district. The Lahaina Station is located in the Lahaina Civic Center complex at Wahikuli, and was built in the early 1970's. The Lahaina Patrol includes 54 full-time personnel, consisting of one (1) captain, one (1) lieutenant, seven (7) sergeants, and 39 police officers. The remaining six (6) personnel consist of public safety aides and administrative support staff.

Fire prevention, suppression and protection services for the Lahaina District is provided by the Lahaina Fire Station, also located in the Lahaina Civic Center, and the Napili Fire Station, located about 9 miles to the north of the project site. The Lahaina Fire Station includes an engine and a ladder company, and is staffed by 30 full-time personnel. The Napili Fire Station consists of an engine company including 15 full-time firefighting personnel.

5. ***Medical Facilities***

The only major medical facility on the Island is Maui Memorial Medical Center, located midway between Wailuku and Kahului. The 194-bed facility provides general, acute, and emergency care services.

Private medical offices, however, are found in West Maui. For example, regular hours are offered by the Maui Medical Group, Lahaina Physicians, West Maui Healthcare Center, and Kaiser Permanente Lahaina Clinic.

6. ***Recreational Facilities***

West Maui is served by numerous recreational facilities offering diverse opportunities for the region's residents. These facilities

include several County parks and beach parks in West Maui. Approximately one-third of the County parks are situated along the shoreline and are excellent swimming, diving, and snorkeling areas. In addition, Kaanapali and Kapalua Resorts operate world-class golf courses which are available for public use.

Recreational facilities in the vicinity of the project site include the Lahaina Aquatic Center, West Maui Youth Center, and the Lahaina Recreation Center. The Lahaina Aquatic Center contains an Olympic-size swimming pool, a children's wading pool, a paved parking lot, and office and storage space, as well as facilities containing showers, restrooms, and changing rooms. The West Maui Youth Center provides a building for youth activities, as well as paved parking and an outdoor playground and basketball court. The Lahaina Recreation Center includes baseball fields and playfields for soccer and football, as well as restroom and paved parking facilities.

In addition, Amfac/JMB Hawaii has commenced site work for a 13-acre park which, when dedicated to the County of Maui, will expand the existing Lahaina Recreation Center. The park, which is expected to be completed by the end of 2000, will include playfields, landscape plantings, restroom facilities, and paved parking areas. Upon completion, the park will be dedicated to the County of Maui.

7. ***Educational Facilities***

The State of Hawaii, Department of Education operates four (4) public schools in West Maui: Lahainaluna High School; Lahaina Intermediate School; King Kamehameha Elementary School; and

Princess Nahienaena Elementary School. All of the public schools are located within the Lahaina Town area.

The region is also served by privately operated pre-elementary and elementary schools.

C. *INFRASTRUCTURE*

1. *Roadways*

Honoapiilani Highway (State Highway 30), the principal arterial roadway in West Maui, provides north-south regional mobility and access to communities in the region. For most of its length, Honoapiilani Highway operates as a two-lane arterial roadway with median left-turn lanes provided at major intersections. From Lahaina Town (just south of Dickenson Street) to the Honokowai Stream Bridge, Honoapiilani Highway functions as a four-lane arterial roadway.

Shaw Street is a two-lane County roadway which begins at Front Street on the west and terminates just before Mill Street on the east. Mill Street is an access-restricted, agricultural road which is privately owned and maintained by Pioneer Mill. A 45-foot wide easement across Mill Street has been provided by Pioneer Mill for access and utility purposes. In addition, a 60-foot wide easement, for access and utility purposes, has been granted to provide access to the project site. A 24-foot wide paved road will be constructed within this easement to provide all-weather access to the site.

Near the eastern terminus of Shaw Street, a paved access road extends about 1,000 feet in a southerly direction to provide access to the West Maui Youth Center, which lies at the beginning of the

access road, and the Lahaina Recreation Center, which borders the remaining extent of the access road.

In the vicinity of the project site, Honoapiilani Highway has a posted speed limit of 35 miles per hour (mph), while Shaw Street has a posted speed limit of 20 mph. The intersection of Honoapiilani Highway and Shaw Street is controlled by a traffic signal. On its north- and southbound intersection approaches, Honoapiilani Highway has exclusive left-turn lanes and shared right-turn/through lanes. On its east- and westbound approaches to the intersection, Shaw Street has separate right-turn lanes and shared left-turn/through lanes.

It should be noted that a 15-passenger van will be utilized for transporting referrals and residents to and from the West Side Resource Center. The State Department of Transportation (DOT) will also be upgrading the existing traffic signal system on Honoapiilani Highway. The traffic signal system from Shaw Street to the Lahaina Civic Center access road will be interconnected to provide coordinated traffic operations through the town of Lahaina. The system upgrade will alleviate a lot of the congestion caused by stop-and-go traffic from Shaw Street to the Civic Center access road by coordinating traffic signal operations and improving traffic flow along the highway. This $1.2 million upgrade will allow the DOT to monitor traffic flow and signalization equipment from its district office in Kahului and quickly respond to changing traffic conditions or equipment problems. Construction of the system upgrade is anticipated to commence by early 2001, with completion expected by mid-2001 (State Department of Transportation, August 2000).

2. ***Water***

The West Maui region is served by the County's Department of Water Supply domestic water system. See Appendix D. The County water system services the coastal areas from Launiupoko to Kaanapali and from Honokowai to Napili. The County's system includes both surface and groundwater sources.

The source of water for Lahaina are four (4) deepwells located above Alaeloa and referred to as Napili Wells 1, 2, and 3, and Honokohau Well A. These wells are supplemented by a water treatment plant above Honokowai that draws surface water from the Honolua Ditch. Several miles of 12- and 16-inch lines and two (2) in-line booster stations convey water from these sources to consumers in Lahaina.

Storage is provided by a 1.5 million gallon (MG) storage tank above Wahikuli and a 1.0 MG tank on Lahainalua Road.

There is an 8-inch line on Shaw Street. This line connects to a 12-inch line on Mill Street that loops back to an 8-inch line on the west side of Honoapiilani Highway.

3. ***Wastewater Systems***

The County's wastewater collection and transmission system and the Lahaina Wastewater Reclamation Facility (LWRF) accommodate the region's wastewater needs. Refer to Appendix D. The LWRF, located along Honoapiilani Highway just north of Kaanapali Resort, has a design capacity of 9.0 MGD.

The nearest sewer manhole for the County sewer system is located

on Shaw Street approximately 700 feet west of Mill Street. According to plans on file at the County's Wastewater Division, an 8-inch sewer line terminates at this manhole.

4. ***Solid Waste***

Residential refuse collection is provided by the County's Solid Waste Division. Private refuse collectors provide solid waste disposal services for commercial and institutional accounts. With the exception of the Hana region, residential and commercial solid waste from throughout the island is transported to the Central Maui Landfill at Puunene.

A refuse transfer station located at Olowalu accepts household and green wastes, as well as used oil, for transport to the Central Maui Landfill in Puunene. The disposal of commercial and institutional refuse is not permitted at the Olowalu transfer station.

5. ***Drainage***

The subject property is presently undeveloped and vegetated by grasses, weeds, shrubs, and trees. The property gently slopes in an easterly to westerly direction and varies in elevation from about 65 feet amsl at its eastern extent to approximately 35 feet along its western boundary.

The subject property is situated within the limits of the 2,140-acre Lahaina subwatershed, one of two subwatersheds which comprise the 4,920-acre Lahaina Watershed; the other subwatershed is the 2,780-acre Kauaula subwatershed.

The Lahaina subwatershed rises from the Pacific Ocean to an

elevation of 2,561 feet amsl. The coastal area of the subwatershed is relatively flat and has been developed for residential and commercial uses. The area above the developed flatland to about the 1,400 foot elevation is gently sloping and was formerly utilized for growing sugar cane. The remaining upper area of the Lahaina subwatershed is steep and was previously utilized for sugar cane cultivation or pasture use.

There are no streams or large defined drainageways in the Lahaina subwatershed. Runoff generated in the former sugar cane fields *above Lahaina Town is* conveyed by numerous small drainageways through the former sugar cane fields and cane haul roads, through culverts in Honoapiilani Highway, and into Lahaina Town where it drains into the ocean or ponds in low spots and dissipates through infiltration or evaporation. The storm drainage system within Lahaina Town consists of short, limited capacity culverts which outlet to the ocean.

The United States Department of Agriculture, through their lead agency the Natural Resource Conservation Service (NCRS), has developed a flood protection plan for the Lahaina watershed which is located between Lahainaluna Road and Puamana. Refer to Appendix D. The construction of the planned improvements is subject to availability of funding at the Federal and County levels of government. During the interim, the NCRS has constructed an earthen diversion ditch between the project site and Kauaula Stream, which is located about 2,500 feet to the south. The NCRS has also installed a retention basin above Mill Street near Dickenson Street.

As previously indicated, the project site is situated within the limits of the Lahaina subwatershed area. The contributory drainage area above the project site contains two (2) former irrigation reservoirs. The first reservoir is located about 200 feet mauka of the project site, while the second reservoir is situated approximately 2,200 feet upstream of the site. The lands within this area were previously planted in sugar cane and are bisected by several dry north-south irrigation ditches. These lands are now fallow due to the termination of Pioneer Mill's sugar cane cultivation operations in 1999.

In its present fallow condition, the total peak runoff from this offsite area for a 100-year, 24-hour storm is estimated to be 334 cubic feet per second (cfs). According to the NRCS, their interim plan calls for runoff from above the project site to be directed into the existing nearby reservoir. A spillway was installed at the southwest corner of this reservoir to prevent overflows and to direct water into the earthen diversion ditch.

In its current pre-development condition, runoff from the 5.0 acre project site for a 50-year, 1-hour storm is estimated to be around 7.6 cfs.

6. ***Electrical, Telephone and CATV Service***

Electrical, telephone, and cable television (CATV) services for the West Maui region are provided by Maui Electric Company, Ltd., Verizon Hawaii, and Hawaiian Cablevision Company, respectively. Power is currently available on Shaw Street up to the Lahaina Aquatic Center.

Chapter III

Potential Impacts and Mitigation Measures

III. POTENTIAL IMPACTS AND MITIGATION MEASURES

A. IMPACTS TO THE PHYSICAL ENVIRONMENT

1. Flora and Fauna

Vegetation on the subject property currently includes weeds, grasses, shrubs, and trees. The scrub vegetation on the site developed following the abandonment of sugar cane cultivation and the demolition of the remnant structures in the former Wainee Village. There are no known rare, endangered or threatened species of flora at the site. Upon completion, the project site will be landscaped, irrigated and maintained.

There are no known rare, endangered or threatened species of avifauna and wildlife in the vicinity of the project. Project-related lighting will utilize appropriate design features to minimize impacts to migratory seabirds which may traverse the area.

In summary, the development of the proposed project is not anticipated to have an adverse effect on the area's flora and fauna.

2. Archaeological Resources

As previously indicated, an archaeological inventory survey of the subject property has been prepared. Refer to Appendix C. The inventory survey is currently being reviewed by the State Historic Preservation Division (SHPD).

The findings of the inventory survey indicate that Site 5042 qualifies for significance under Criterion "D" of the Federal and State Historic Preservation guidelines. This criterion defines significant resources as those which have yielded or have the potential to yield information important in pre-history or history.

It should be noted, however, that since both of the site's plantation-era features have yielded adequate information during the inventory survey, Site 5042 has been deemed to be no longer significant for its information content. In this light, the inventory survey recommends no further archaeological work.

Should human remains, significant archaeological deposits, or cultural artifacts be inadvertently encountered during monitoring and ground altering construction, work shall cease at once in the immediate area of the find, and the find shall be protected from further damage. The contractor shall immediately notify the SHPD and procedures for the treatment of inadvertently discovered human remains shall be followed pursuant to Chapter 6E-43.6, HRS.

A cultural impact assessment has been prepared in connection with the proposed development of the West Side Resource Center. See Appendix C-1. The assessment notes that traditional Hawaiian cultural land use in the general vicinity of the project site primarily involved the production of taro. The assessment also indicates that the project site does not lie in an area through which the mauka-makai trail system passed.

As noted in the assessment, the taro lands were eventually converted to sugar cane fields which were plowed and cultivated for decades. Around 1900, the construction of Wainee Village further impacted any remnants of the former taro lo'i system that may have survived sugar cane cultivation. Individuals who were interviewed for the cultural impact assessment agreed that plantation agriculture had signifcantly altered the cultural

landscape. It should be noted, however, that none of the informants felt that the proposed project would adversely affect the traditional Hawaiian cultural landscape that was once present in this area of the island.

3. ***Air Quality***

Air quality impacts attributed to the project will include dust generated by short-term construction-related activities. Site work such as clearing, grubbing and grading, and utilities and roadway construction for example, will generate air-borne particulates. Dust control measures, such as regular watering and sprinkling have been, and will continue to be implemented to minimize wind-blown emissions.

Once the project is completed, project-related vehicular traffic will generate automotive emissions. However, project-related emissions are not expected to adversely impact local and regional ambient air quality conditions.

4. ***Noise***

Dominant noise sources in the project area include traffic on Honoapiilani Highway and Shaw Street.

Ambient noise conditions will be temporarily impacted by construction activities. Heavy construction equipment, such as bulldozers, front-end loaders, and material-transport vehicles, will likely be the dominant source of noise during the site construction period. Construction activities will be limited to normal daylight working hours.

It should also be noted that there are no noise sensitive receptors in the vicinity of the project site. At its closest point, the site is located about 700 feet upslope from the Lahaina Aquatic Center, West Maui Youth Center, and Lahaina Recreation Center. The subject property also adjoins a 13-acre park (currently under construction) which will expand the area of the existing Lahaina Recreation Center. The closest dwelling in the vicinity is located in the Komohana Hale Subdivision, approximately 1,000 feet to the southwest of the property.

Once completed, the project is not anticipated to be a noise source which will adversely impact surrounding properties.

B. *IMPACTS TO COMMUNITY SETTING*

1. *Land Use and Community Character*

The subject property is situated in an area which is suitable for the development of the proposed project. The property is bordered by vacant, undeveloped lands on the north, east, and south, and the Lahaina Recreation Center's 13-acre park expansion area on the west. In addition the lands encompassing the Lahaina Aquatic Center, West Maui Youth Center, and the Lahaina Recreation Center provides an open expanse which separates and buffers the site from residential and commercial areas. The nearest residential development is located about 1,000 feet to the southwest of the project site, while the closest commercial property is approximately 2,000 feet to the northwest of the site.

2. *Population and Economy*

The proposed project will provide construction employment which will support the construction industry in the short term.

Employment provided through the construction phase of project development will also help to support other businesses which are economically linked to the construction industry.

The project is not anticipated to result in significant population in-migration.

A Social Impact Assessment that was prepared by Earthplan in February 1997 for the development of the Kaanapali Ocean Resort was examined to identify any potential adverse effects the proposed project may have on any distinct group of minority or low-income populations in the region. Based on an assessment of the demographic information contained in the report regarding population, housing, and labor, as well as household and family characteristics, no minority or low-income populations have been identified that would be adversely impacted by the proposed project.

3. ***Police, Fire and Medical Services***

The proposed project is not anticipated to affect service area limits and capabilities of police, fire and emergency medical operations.

4. ***Recreational and Educational Facilities***

The proposed project is not considered significant in terms of population generation. Accordingly, the project is not expected to place any new demand for recreational facilities. In addition, West Maui households are anticipated to be the primary source of residents for the project's long-term affordable rental housing units.

5. *Housing*

In recent years, Maui's housing inventory has improved in terms of supply but is still outpaced by the demand for affordable housing. In addition, the need for emergency/transitional housing for homeless families and individuals in West Maui has yet to be addressed. The cost and lack of affordable housing continues to create economic hardships for many families, particularly low-income households. With limited vacancies and housing available at affordable prices, families often pay more than they can afford, accept poor quality housing, and/or live in overcrowded conditions. Increasingly, family members are forced to work at more than one job in order to keep household incomes apace with housing prices and rents.

In this regard, the proposed project's support services, as well as its emergency, transitional, and long-term affordable housing programs, will provide a system of vertically integrated services that will assist graduates of the project's transitional housing program, as well as qualified families and individuals who meet the County's eligibility requirements for affordable rental housing, to move from a state of dependency and homelessness to self-sufficiency and independence.

C. *IMPACTS TO INFRASTRUCTURE*

1. *Roadways*

A traffic impact analysis for the proposed project was prepared in October 2000. See Appendix E. The report reveals that peak traffic hours occur between 7:00 a.m. to 8:00 a.m. in the morning and between 3:00 p.m. and 4:00 p.m. during the afternoon. Existing levels of service (LOS) were evaluated at the Honoapiilani

Highway/Shaw Street intersection. LOS is represented by a letter designation ranging from "A" to "F" with LOS A reflecting free-flow operating conditions and LOS F representing congested conditions.

As reflected by the traffic impact analysis, the intersection of Honoapiilani Highway and Shaw Street operates well during peak traffic hours. Some vehicle queuing from the Honoapiilani Highway/Dickenson Street intersection extends to, but not through, the Shaw Street intersection. Queuing occurred sporadically during the height of the peak hours but were not long duration events; the functioning of the Shaw Street intersection did not appear to be affected.

The Shaw Street approaches to the intersection operate at LOS D and LOS C during the morning and afternoon peak hours, respectively. This LOS is related to the delay that vehicles on the Shaw Street approaches experience while waiting for the traffic signal at the intersection to turn green. Since most of the signal's cycle length is allocated for traffic on Honoapiilani Highway, traffic on the Shaw Street approaches must wait, on the average, between 30 to 40 seconds for a green signal. This wait, taken as a delay by intersection capacity methodology, results in the Shaw Street approaches operating at LOS D at times due to the wait experienced by through and left-turning vehicles. It should be noted, however, that the vehicular demand for these movements is small; through movements do not exceed 30 vehicles per hour (vph), while left-turning movements do not exceed 60 vph. The report reflects that no significant queue forms on the Shaw Street approaches and that the existing overall intersection level of service operates at LOS C.

The proposed project is anticipated to be completed by the year 2002. At build-out, a total of 52 and 71 vehicles are estimated to enter and exit the project site during the AM and PM peak hours, respectively. Traffic volumes at the Honoapiilani Highway/Shaw Street intersection for the year 2002 were estimated with and without the project. Historical traffic volumes from the DOT were used to identify the annual growth rate of traffic along Honoapiilani Highway. To be conservative, as well as account for future activity in the area (e.g., Lahaina Recreation Center park expansion), a higher annual rate of 2.5 percent was used to growth factor the existing traffic volumes at the Honoapiilani Highway/Shaw Street intersection to estimate year 2002 conditions without the project. Traffic generated by the proposed project was then assigned to the traffic movements at the intersection.

The traffic impact analysis indicates that the Honoapiilani Highway/Shaw Street intersection is anticipated to operate well during peak hour traffic conditions, with or without the proposed project. The report indicates that slight increases in delay for traffic movements at this intersection are primarily attributable to the background increase in traffic volume on Honoapiilani Highway. No change from the existing intersection level of service is anticipated.

As part of the proposed project, Shaw Street will be extended east about 1,180 feet to provide access to the project site. Presently, Shaw Street terminates at the driveway to the Lahaina Recreation Center and a driveway that leads to the overflow parking area for the Lahaina Aquatic Center. When the Shaw Street extension occurs, a four-legged intersection will be formed by Shaw Street

and these driveways. With regard to the foregoing, the traffic impact analysis recommends the installation of STOP-sign controls on all approaches to this new four-legged intersection.

In light of the low estimated traffic volumes and the intersection analyses documented in the report, as well as the recommended installation of the STOP-sign controls, the traffic impact analysis indicates that the surrounding roadways and the Honoapiilani Highway/Shaw Street intersection can accommodate the traffic from the proposed project.

The design and construction of the Shaw Street extension will be coordinated with the Maui County Department of Public Works and Waste Management.

2. ***Water***

The onsite distribution system for the proposed project will connect to the Department of Water Supply's existing 8-inch water line that ends at the intersection of Mill and Shaw Streets. Refer to Appendix D. From this point, a new line will be extended to the project site and then looped within the site.

Each building will be metered separately. Fire hydrants will be installed throughout the project to provide overlapping coverage and fire protection to all structures within a 150 foot radius as required by the Department of Fire Control.

Based on the Department of Water Supply's domestic consumption guideline, the average daily demand for the proposed project at full build-out is estimated to range from 36,000 to 40,000 gallons per

day (gpd). The existing source, storage and distribution systems are adequate to meet this daily water demand and the required fire flow requirement. Water requirements for the proposed project will be coordinated with the Department of Water Supply to ensure that adequate supply is available at the time of development.

3. Wastewater

According to the County's Wastewater Division, the existing sewer system ends on Shaw Street on the makai side of Honoapiilani Highway. Refer to Appendix D. However, a sewer line was extended across Honoapiilani Higway to service the Lahaina Aquatic Center. To provide sewer service for the proposed project, a tie-in will be made to the Lahaina Aquatic Center system on the mauka side of Honoapiilani Highway. A gravity line will then be extended from the project site to this connection point.

Wastewater generated by the proposed project will be collected by an onsite gravity collection system, conveyed through the new 8-inch gravity line in Shaw Street, and directed into the County's existing 21-inch transmission line in Honoapiilani Highway. A series of large diameter gravity collectors, pump stations, and force mains then transports the wastewater to the Lahaina Wastewater Reclamation Facility for treatment and disposal.

The wastewater generated by the proposed project upon build-out is estimated to range between 24,000 and 28,000 gpd. As previously indicated, the County's Lahaina Wastewater Reclamation Facility has ample capacity to accommodate the additional wastewater generated by the project. The wastewater requirements for the proposed project are not expected to have an

adverse effect on existing wastewater facilities or capacities. Sewer system improvements will be designed in accordance with applicable regulatory standards.

While adequate treatment capacity for the proposed development is available, coordination will be undertaken with the Department of Public Works and Waste Management, Wastewater Reclamation Division, during the County's construction plans review and approval phase of the project.

4. ***Solid Waste***

Trash bin enclosures will be placed at appropriate intervals through the project site. Once completed, the proposed project will be served by a private refuse collection company. Solid waste generated from the project will be disposed at the County's Central Maui Landfill.

5. ***Drainage***

Site work for the proposed project will involve clearing and grubbing, as well as excavating, filling, and grading. It should be noted that grading is proposed to be implemented in a single phase. Upon completion of site work, all exposed areas will be grassed to minimize soil loss and erosion.

As previously indicated, approximately 7.6 cfs of runoff is generated by the project site. Refer to Appendix D. This runoff sheet flows across the site into an existing depression located above Mill Street and a former cane-haul road. Once this depression exceeds its storage capacity, the runoff overflows toward a shallow retention basin located to the north of the Lahaina

Aquatic Center. Two (2) 24-inch culverts then convey the flow across Honoapiilani Highway onto private lands located on the makai side of the highway.

The contributory offsite drainage area above the project site contains two (2) former irrigation reservoirs, with the closest reservoir located about 200 feet mauka of the site. Peak runoff for a 100-year, 24-hour duration storm is around 334 cfs. This offsite surface runoff sheet flows across the project site and into the existing depression above Mill Street.

Post-development runoff from the 5.0-acre project site at full build-out is expected to be 22.7 cfs for a 50-year, 1-hour storm event. A storm drain system, with catch basins spaced at appropriate locations throughout the site, will be installed to direct runoff into onsite subsurface retention facilities. These retention facilities, which will consist of large diameter perforated culverts located within the parking lots, will be sized to retain the additional runoff generated by the project. An earthen berm or rock wall will also be constructed along the mauka boundary of the project site to prevent offsite runoff from entering the site.

The interim diversion channel constructed by the Natural Resources Conservation Service (NCRS) will prevent offsite runoff from sheet flowing across the project site. In addition, according to the NRCS interim plan, offsite runoff will first be directed into the existing empty reservoir located 200 feet east of the project site. Since this reservoir is not large enough to handle all of the offsite runoff during a 100-year storm, a spillway was constructed at its southwest corner of the reservoir to direct the overflow toward the

recently constructed diversion channel. This reservoir will be fenced for safety and to prevent unlawful dumping. The Lahaina Watershed plan developed by the NRCS calls for a concrete lined channel to be constructed between this reservoir and Lahainaluna Road in the future. Runoff from the project's access road will be directed into a subsurface retention system which will be located in the roadway's shoulder in the area above Mill Street.

By utilizing the existing reservoir for additional storage of offsite runoff, less stormwater will be going into the existing natural depression by Mill Street. With the installation of an onsite subsurface drainage facility, the post-development peak runoff rate will be maintained at pre-development rates.

Erosion control measures and Best Management Practices (BMPs) will be implemented during the construction period to minimize soil loss and erosion. A detailed grading and erosion control plan will be prepared in accordance with County standards and will be submitted to the Department of Public Works and Waste Management (DPWWM) for review and approval. In addition, an application for a National Pollutant Discharge Elimination System (NPDES) permit will be submitted to the State Department of Health for review and approval.

The proposed drainage improvements will be coordinated with the DPWWM and will be designed to produce no adverse effects to adjoining and downstream properties. All improvements will conform to and be designed in accordance with applicable regulatory requirements.

6. ***Electrical, Telephone and CATV Service***

Electrical, telephone, and CATV lines will be extended overhead into the project site. Parking lot and walkway lighting will also be provided.

D. *CUMULATIVE AND SECONDARY IMPACTS*

A cumulative impact is defined as an impact to the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. For example, actions that involve the construction of public facilities or infrastructure, may stimulate secondary impacts such as population growth and increase demand for public services and infrastructure.

On a long-term basis, the proposed project will benefit the socio-economic fabric of the community by fulfilling the existing need for a homeless resource center and long-term affordable rental housing for the West Maui region. The residents and employees of the project will also support the local economy, either directly or indirectly, through the contribution of wages, salaries, benefits, and taxes. The proposed project is not anticipated to adversely impact infrastructure and public service systems and facilities.

Chapter IV

Relationship to Land Use Plans, Policies, and Controls

IV. RELATIONSHIP TO LAND USE PLANS, POLICIES, AND CONTROLS

A. STATE LAND USE DISTRICTS

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, established the four (4) major land use districts in which all lands in the State are placed. These districts are designated "Urban", "Rural", "Agricultural", and "Conservation". The subject property is situated within the State "Agricultural" District. See Figure 4.

Pursuant to Section 201G-118, HRS, an exemption from Sections 205-2 and 205-4.5, HRS, is being requested to allow the project to be developed on agricultural lands.

B. HAWAII STATE PLAN

Chapter 226, HRS, also known as the Hawaii State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. As reflected by Section 226-19, HRS, the plan outlines objectives and policies with regard to socio-cultural advancement and housing.

More specifically, the State objectives include the development of residential areas sensitive to community needs and the opportunity for families and individuals to secure reasonably priced housing that satisfactorily accommodates their needs. As indicated by the plan, it is the policy of the State to increase rental opportunities, effectively accommodate housing needs, facilitate the use of available, undeveloped urban lands for housing, and stimulate and promote feasible alternatives that increase housing opportunities for low-income households.

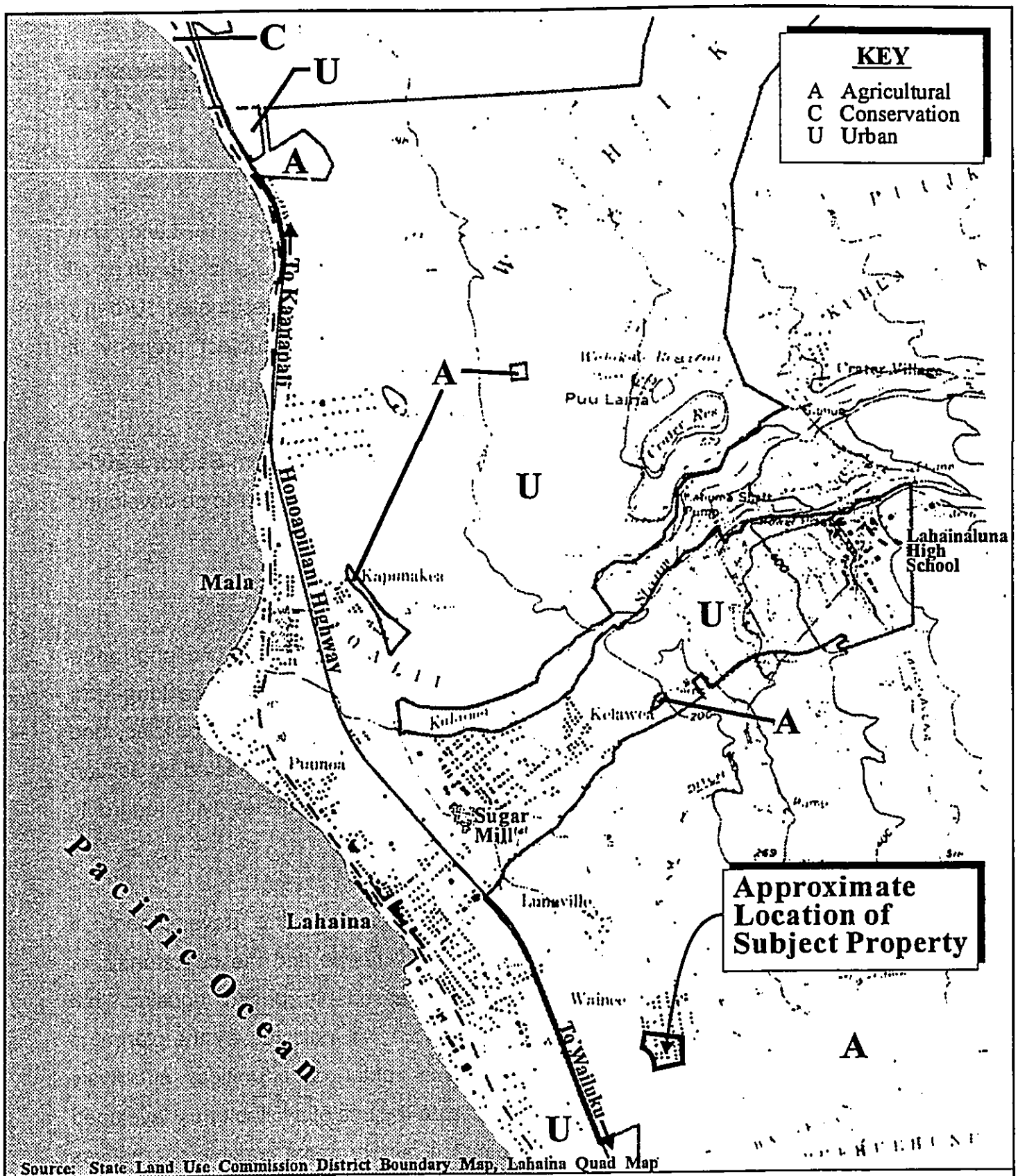


Figure 4

West Side Resource Center

State Land Use Classifications

0 500 1000 2000 Feet

MUNEKIYO, ARAKAWA & HIRAGA, INC.

Prepared for: Ka Hale A Ke Ola

C. *MAUI COUNTY GENERAL PLAN*

The Maui County General Plan (1990 Update) sets forth broad objectives and policies to help guide the long-range development of the County. As stated in the Maui County Charter, "The purpose of the General Plan is to recognize and state the major problems and opportunities concerning the needs and the development of the County and the social, economic and environmental effects of such development and set forth the desired sequence, patterns and characteristics of future development".

The proposed action is in keeping with the following General Plan objectives and policies:

Objectives:

1. To provide an economic climate which will encourage controlled expansion and diversification of the County's economic base.

2. To provide a choice of attractive, sanitary and affordable homes for all our residents.

Policies:

1. Encourage the construction of housing in a variety of price ranges and geographic locations.

2. Streamline or "fast-track" the governmental review process for affordable single-family and multi-family housing projects.

D. *WEST MAUI COMMUNITY PLAN*

Nine (9) community plan regions have been established in Maui County. Each region's growth and development is guided by a Community Plan, which contain objectives and policies drafted in accordance with the County General Plan. The purpose of the Community Plan is to outline a relatively detailed agenda for carrying out these objectives.

The proposed project falls within the jurisdiction of the West Maui Community Plan adopted in 1996. Land use guidelines are set forth by the Lahaina Community Plan Land Use Map. See Figure 5. The 5.0-acre subject parcel is designated for "Agriculture" and "Single-Family Residential" uses by the Community Plan. A 0.4-acre portion of the parcel is designated "Agriculture", while the remaining 4.6 acres are designated "Single-Family Residential".

The proposed project is in keeping with the following goals, objectives, and policies of the West Maui Community Plan.

Goals:

1. An attractive, well-planned community with a mixture of compatible land uses in appropriate areas to accommodate the future needs of residents and visitors in a manner that provides for the stable social and economic well-being of residents and the preservation and enhancement of the region's open space areas and natural environmental resources.

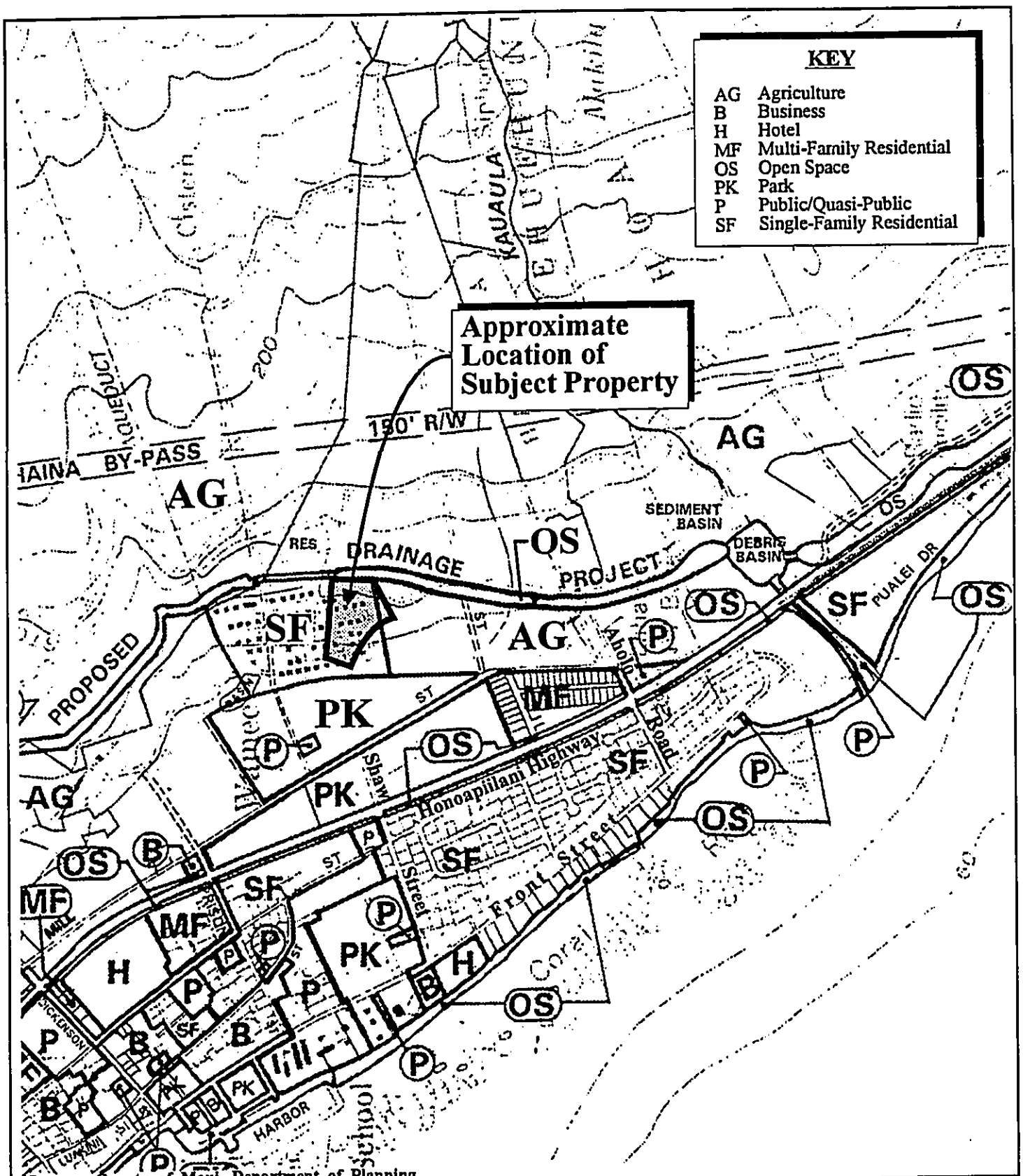
2. A sufficient supply and choice of attractive, sanitary, and affordable housing accommodations for a broad cross section of residents.

Objectives and Policies:

1. Provide a variety of affordable housing opportunities, including improved lots, and self-help projects and special needs housing for the elderly, single parent families, homeless, and disabled.

2. Encourage the expansion of community and social service facilities and programs in West Maui in convenient and accessible locations through public and private partnerships.

Pursuant to Section 201G-118, HRS, an exemption from Chapter 2.80A of the Maui County Code pertaining to General Plan and Community Plans is being requested to allow the project to be developed without



Source: County of Maui, Department of Planning

Figure 5 West Side Resource Center
West Maui Community Plan
Land Use Designations

0 250 500 1000 Feet

MUNEKIYO, ARAKAWA & HIRAGA, INC.

Prepared for: Ka Hale A Ke Ola

requiring a Community Plan Amendment.

E. *COUNTY ZONING*

The subject property is zoned for "Agricultural District" use by Maui County Zoning. Pursuant to Section 201G-118, HRS, an exemption from Chapter 19.30A of the Maui County Code pertaining to the Agricultural District is being requested to allow the project to be developed in accordance with the standards for the A-1, Apartment District as well as allow certain specified permitted uses such as the uses associated with the proposed resource center building.

F. *COASTAL ZONE MANAGEMENT*

The Hawaii Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation, protection, and restoration of natural resources of Hawaii's coastal zone.

As set forth in Chapter 205A, HRS, this section addresses the project's relationship to applicable coastal zone management considerations.

(1) Recreational Resources

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies:

(A) Improve coordination and funding of coastal recreational planning and management; and

(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other

areas;

(ii) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;

(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;

(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;

(v) Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;

(vi) Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and

(viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of Section 46-6, HRS.

Response: The project itself is not anticipated to adversely impact demands on regional recreational facilities. In addition, the project is not anticipated to adversely impact coastal recreational opportunities and resources.

(2) ***Historic Resources***

Objective:

Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

(A) Identify and analyze significant archeological resources;
(B) Maximize information retention through preservation of remains and artifacts or salvage operations; and
(C) Support state goals for protection, restoration, interpretation, and display of historic resources.

Response: The archaeological inventory survey of the subject property classified Site 5042 as being significant for its information content. However, since both of the site's plantation-era features yielded adequate information during the inventory survey, Site 5042 has been deemed to be no longer significant for its information content. Accordingly, the inventory survey recommends that no further archaeological work be undertaken. Should any inadvertent human burials, archaeological deposits or cultural artifacts be located during site work, the find will be protected from damage and the SHPD will be promptly notified to formulate an appropriate mitigative strategy.

(3) ***Scenic and Open Space Resources***

Objectives:

Protect, preserve and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

(A) Identify valued scenic resources in the coastal zone

management area;

(B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;

(C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and

(D) Encourage those developments which are not coastal dependent to locate in inland areas.

Response: The project has been architecturally designed to be compatible in height and mass with surrounding properties. The project site is not within a scenic view corridor and does not adversely impact views to and along the shoreline.

(4) ***Coastal Ecosystems***

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

(A) Improve the technical basis for natural resource management;

(B) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

(C) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and

(D) Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.

Response: The design and construction of the drainage system for the project will be coordinated with the County Department of

Public Works and Waste Management to ensure that stormwater runoff is adequately accommodated by the system and does not adversely affect downstream and adjacent properties. In addition, Best Management Practices (BMPs) will be implemented as part of the project's site construction work. In this regard, appropriate technical measures will be implemented to mitigate adverse impacts to coastal ecosystems.

(5) ***Economic Uses***

Objectives:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

(A) Concentrate coastal dependent development in appropriate areas;

(B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

(C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:

  (i) Use of presently designated locations is not feasible;

  (ii) Adverse environmental effects are minimized; and

  (iii) The development is important to the State's economy.

Response: The subject property is currently in the process of being transferred to the County of Maui by Pioneer Mill Company,

Ltd. Ka Hale A Ke Ola, in association with the County Department of Housing and Human Concerns, will utilize this site for the West Side Resource Center and thereby address the community's identified need for a facility which will help the homeless and low-income residents of the region.

(6) ***Coastal Hazards***

Objectives:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

(A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;
(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards;
(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program;
(D) Prevent coastal flooding from inland projects; and
(E) Develop a coastal point and nonpoint source pollution control program.

Response: The project site is not located within an environmentally sensitive area which is subject to natural hazards. Appropriate technical measures will be designed and constructed to improve stormwater management for the project site and contributing drainage areas.

(7) ***Managing Development***

Objectives:

Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

(A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
(B) Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and
(C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Response: The applicant has worked closely with governmental agencies to ensure that the development of the proposed project is processed in a smooth and timely manner. Opportunity for public understanding of the project will be provided through the County's Section 201G-118, HRS review process.

(8) ***Public Participation***

Objectives:

Stimulate public awareness, education, and participation in coastal management.

Policies:

(A) Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;
(B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal-related issues, developments, and government activities; and
(C) Organize workshops, policy dialogues, and site-specific medications to respond to coastal issues and conflicts.

Response: The project will be reviewed through the County's Section 201G-118, HRS process to provide opportunity for

governmental and public input. In addition, this environmental assessment will be processed in accordance with Chapter 343, HRS to provide opportunity for comment by agencies and the public.

(9) Beach Protection

Objectives:

Protect beaches for public use and recreation.

Policies:

(A) Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;
(B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and
(C) Minimize the construction of public erosion-protection structures seaward of the shoreline.

Response: The project site is not located in proximity to beach areas and will not affect beach processes or uses.

(10) Marine Resources

Objectives:

Implement the State's ocean resources management plan.

Policies:

(A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
(B) Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
(C) Coordinate the management of marine and coastal

resources and activities management to improve effectiveness and efficiency;

(D) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;

(E) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and

(F) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

Response: The proposed action is not anticipated to adversely impact marine resources. At its closest point, the project site is situated approximately 2,500 feet away from the shoreline.

Chapter V

Summary of Adverse Environmental Effects Which Cannot Be Avoided

V. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Implementation of the proposed project will result in temporary construction-related impacts as described in Chapter III, Potential Impacts and Mitigation Measures.

Temporary noise and air quality impacts are typically associated with construction activities. These effects have been and will continue to be mitigated through appropriate construction management practices.

From a long-term perspective, there are no significant adverse environmental effects anticipated as a result of the proposed project.

Chapter VI

Alternatives to the Proposed Action

VI. ALTERNATIVES TO THE PROPOSED ACTION

A. NO ACTION ALTERNATIVE

The "no action" alternative would result in the subject property remaining in its current vacant and undeveloped condition. This alternative does not possess beneficial community value, particularly since the community's need for a facility which will assist the homeless and low-income residents of West Maui will be unfulfilled.

B. OTHER LAND USE ALTERNATIVES

The potential for using the subject property for other land uses, such as single- or multi-family residential uses, have been identified in the past. The subject action proposes a homeless resource center and long-term affordable rental housing to address a specific segment of the community, for which such a facility is most needed.

C. SITE PLAN ALTERNATIVES

During the project's site planning phase, the operational requirements of Ka Hale A Ke Ola and the needs of the homeless and low-income residents of the region were examined to ensure that spatial and functional criteria for the project were adequately addressed. The site planning process involved an analysis of space needs, missions and functions, area requirements, spaces and adjacencies, and people equipment activities schedule, and space relationships and layouts. Through the project's planning process, a site plan was prepared and reviewed to ensure that all operational and performance standards can be addressed.

Chapter VII

Irreversible and Irretrievable Commitments of Resources

VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The development of the proposed project would involve the commitment of land and funds. In addition, labor and materials resources would be expended as part of the project's construction phase. Commitment of these resources are considered irreversible and irretrievable. This commitment, however, is considered appropriate in the context of meeting the community's existing need for a facility to help the homeless and low-income residents of West Maui.

Chapter VIII

Findings and Conclusions

VIII. FINDINGS AND CONCLUSIONS

Every phase of the proposed action, expected consequences, both primary and secondary, and the cumulative as well as the short-term and long-term effects of the action have been evaluated in accordance with the Significance Criteria of Section 11-200-12 of the Administrative Rules. Discussion of project conformance to the criteria is noted as follows:

1. *No Irrevocable Commitment to Loss or Destruction of any Natural or Cultural Resource Would Occur as a Result of the Proposed Project*

The project will not result in the loss or destruction of any valuable natural resources. The site was previously used for sugar cane cultivation and plantation housing and was not considered a significant habitat or source for rare, endangered or threatened species of flora or fauna. The archaeological inventory survey of the subject property indicates that Site 5042 qualifies for significance due to its information content. It should be noted, however, that both of the site's plantation-era features have yielded adequate information during the inventory survey and the site is deemed to be no longer significant for its information content. In this light, the inventory survey recommends that no further archaeological work is needed.

In addition, in the context of the area's land use history and surrounding existing developments, the implementation of the proposed project is not anticipated to have an adverse impact upon cultural resources.

2. *The Proposed Action Would Not Curtail the Range of Beneficial Uses of the Environment*

The proposed project will not curtail the range of beneficial uses of the environment. There are no impacts attributed to the project which will limit the use of surrounding lands. Environmental parameters such as air

quality, water quality, and scenic views will similarly not be adversely affected by the project.

3. ***The Proposed Action Does Not Conflict With the State's Long-Term Environmental Policies or Goals or Guidelines as Expressed in Chapter 344, HRS***

The State Environmental Policy and Guidelines are set forth in Chapter 344, HRS. The proposed action is in consonance with the policies and guidelines of this chapter.

4. ***The Economic or Social Welfare of the Community or State Would Not Be Substantially Affected***

The project will directly benefit the local economy by providing construction and construction-related employment. In the long term, the project will support the local economy through the contribution of salaries, wages, benefits and taxes, as well as through the purchases of goods and services. The proposed project will also have a beneficial effect upon the social welfare of the community by providing a well designed and functional living environment for its residents.

5. ***The Proposed Action Does Not Affect Public Health***

No adverse impacts to the public's health and welfare are anticipated.

6. ***No Substantial Secondary Impacts, Such as Population Changes or Effects on Public Facilities, are Anticipated***

The proposed project is being implemented to provide a homeless resource center and long-term affordable rental housing facility for West Maui's homeless and low-income residents. The project is not a source of new population to the region as the majority of occupants would be from the West Maui region. Moreover, existing and potential residents are expected to be primarily employed in the West Maui region. In this

regard, the proposed project is not anticipated to adversely affect public services in the region, such as schools, police, and fire protection.

Improvements to infrastructure systems will be coordinated with the applicable governmental agencies.

7. ***No Substantial Degradation of Environmental Quality is Anticipated***

Excavation, grading, and fill activities will create temporary short-term nuisances related to noise and dust. Appropriate dust control and noise mitigation measures will be implemented by the contractor to ensure that fugitive dust and noise generated in connection with construction is minimized.

Drainage system improvements will be designed to mitigate impacts to downstream properties and costal ecosystems.

Substantial degradation of environmental quality resulting from the project is not anticipated.

8. ***The Proposed Action Does Not Involve a Commitment to Larger Actions, Nor Would Cumulative Impacts Result in Considerable Effects On The Environment***

There are no additional development components associated with the project. Accordingly, the impacts assessed herein have been based on the entire action.

9. ***No Rare, Threatened or Endangered Species or Their Habitats Would be Adversely Affected By The Proposed Action***

There are no rare, threatened or endangered species of flora, fauna, or avifauna or their habitats within the project limits.

10. ***Air Quality, Water Quality or Ambient Noise Levels Would Not Be Detrimentally Affected By The Proposed Project***

Construction activities will result in short-term air quality and noise impacts. Dust control measures, such as regular watering and sprinkling, and installation of dust screens have been and will continue to be implemented to minimize wind-blown emissions. Noise impacts will occur primarily from construction equipment. Equipment mufflers or other noise attenuating equipment, as well as proper equipment and vehicle maintenance, have been and will continue to be used during construction activities.

In the long term, the project is not anticipated to have a significant impact on air quality, water quality or ambient noise conditions.

11. ***The Proposed Project Would Not Affect Environmentally Sensitive Areas, Such As Flood Plains, Tsunami Zones, Erosion-prone Areas, Geologically Hazardous Lands, Estuaries, Fresh Waters or Coastal Waters***

The project site is not located within any environmentally sensitive areas. In addition, the property is not located within a flood hazard or tsunami inundation area.

12. ***The Proposed Project Will Not Substantially Affect Scenic Vistas and Viewplanes Identified in County or State Plans or Studies***

The project will not affect coastal scenic and open space resources and will not affect scenic view corridors.

13. ***The Proposed Project Will Not Require Substantial Energy Consumption***

The subject project will involve the commitment of fuel for construction equipment, vehicles, and machinery during construction activities.

In the long term, the proposed West Side Resource Center will create additional demand for electricity. However, in the context of the region's overall energy consumption and the project's use of solar water heaters, the demand for electricity is not considered excessive, nor is it considered substantial.

Chapter IX

List of Permits and Approvals

IX. LIST OF PERMITS AND APPROVALS

The following State and County permits and approvals are required for project implementation:

State of Hawaii

National Pollutant Discharge Elimination System (NPDES) Permit

Community Noise Permit

County of Maui

Section 201G-118, HRS Approval

Construction Permits (e.g., grading, building, plumbing, electrical, Work to Perform in County Right-of-Way).

Chapter X

Agencies Consulted During the Preparation of the Draft Environmental Assessment; Letters Received and Responses to Substantive Comments

X. AGENCIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS

The following agencies were consulted during the preparation of the Draft Environmental Assessment. Agency comments and any necessary responses to substantive comments are also included in this section.

1. Neal Fujiwara, Soil Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
210 Imi Kala Street, Suite 209
Wailuku, Hawaii 96793-2100

2. William Lennan
Department of the Army
U.S. Army Engineer District, Hnl.
Attn: Operations Division
Bldg. T-1, Room 105
Fort Shafter, Hawaii 96858-5440

3. Robert P. Smith
Pacific Islands Manager
U. S. Fish and Wildlife Service
P.O. Box 50167
Honolulu, Hawaii 96850

4. David Blane, Director
State of Hawaii
Office of Planning
Department of Business, Economic, Development and Tourism
P.O. Box 2359
Honolulu, Hawaii 96804

5. Denis Lau, Chief
Clean Water Branch
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814

6. Herbert Matsubayashi
District Environmental Health Program Chief
State of Hawaii
Department of Health
54 High Street
Wailuku, Hawaii 96793

7. Timothy Johns, Director
State of Hawaii
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

8. Don Hibbard
State of Hawaii
Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Blvd., Room 555
Kapolei, Hawaii 96707

9. Robert Siarot, Maui District Engineer
State of Hawaii
Department of Transportation
Highways Division
650 Palapala Drive
Kahului, Hawaii 96732

10. Clayton Ishikawa, Chief
County of Maui
Department of Fire Control
200 Dairy Road
Kahului, Hawaii 96732

11. Floyd Miyazono, Director
County of Maui
Department of Parks and Recreation
1580 C. Kaahumanu Avenue
Wailuku, Hawaii 96793

12. John Min, Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793

13. Tom Phillips, Chief
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793

14. Charles Jencks, Director
County of Maui
Department of Public Works and Waste Management
200 South High Street
Wailuku, Hawaii 96793

15. David Craddick, Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793

16. **West Maui Taxpayers Association**
P.O. Box 10338
Lahaina, Hawaii 96761

COMMENTS

AUG 2 8 2000

DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF

August 24, 2000

Regulatory Branch

Mr. Michael T. Munekiyo, A.I.C.P.
Project Manager
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

This letter responds to your request for comments on the proposed Maui Ka Hale A Ke Ola Homeless Resource Center, dated August 21, 2000. The information summary is not sufficiently detailed to determine if a Department of the Army (DA) permit will be required for this project. If information concerning the presence or absence of streams or wetlands on the project site is included in the environmental assessment we may be able to make a determination. If this information is not included, a site visit will likely be required.

If you have any questions concerning this determination, please contact William Lennan of my staff at 438-6986 or FAX 438-4060, and reference File No. 990000293.

Sincerely,

George P. Young, P.E.
Chief, Regulatory Branch

BENJAMIN J. CAYETANO
GOVERNOR

SEP 0 1 2000

BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

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

In reply, please refer to:
EMD/CWB
08070PKP.00

August 28, 2000

Mr. Michael T. Munekiyo, A.I.C.P.
Project Manager
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

Subject: Proposed West Maui Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project

The Department of Health, Clean Water Branch has reviewed the subject submittal and has the following comments:

1. The Army Corps of Engineers should be contacted to identify whether a Federal permit (including a Department of Army permit) is required for this project. If it is determined that a Federal permit is required for the subject project, then a Section 401 Water Quality Certification would also be required from our office;

2. If the project involves any of the following discharges into state waters, a NPDES general permit is required for each activity:

   a. Storm water runoff associated with construction activities, including clearing, grading, and excavation that result in the disturbance of equal to or greater than five (5) acres of total land area (Note: After March 10, 2003, NPDES general permit coverage would also be required for discharges of storm water associated with construction activities, including clearing, grading, and excavation that result in the disturbance of one (1) acre or more but less than five (5) acres);

   b. Hydrotesting water; and

   c. Construction dewatering effluent.

The Department requires that Notices of Intent (NOI) for NPDES general permits be submitted thirty days before the discharge is to occur. NOI can be picked up at our office or downloaded from our website at *http://www.state.hi.us/doh/eh/cwb/forms/index.html*.

Should you have any questions, please contact Ms. Kris Poentis, Engineering Section of the Clean Water Branch, at 586-4309.

Sincerely,

for DENIS R. LAU, P.E., CHIEF
Clean Water Branch

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

SEP 07 2000

TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JANET E. KAWELO

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

September 1, 2000

Michael Munekiyo
Munekiyo, Arakawa, and Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawai'i 96793

LOG NO: 26096 ✓
DOC NO: 0008MK11

Dear Mr. Munekiyo:

Subject: **Historic Preservation Review for the Proposed Homeless Resource Project Lahaina, Lahaina District, Maui**

Thank you for the opportunity to review and discuss with you your proposal for the Homeless Resource Center in Lahaina. Our review is based on reports, maps, and aerial photographs maintained at the Historic Preservation Division. In addition, Dr. Melissa Kirkendall, Maui SHPD conducted a field inspection of the subject parcel.

Based on our discussion, we understand that the undertaking consists of construction of the homeless center, and adjacent support facilities.

A search of our records indicates the subject property has not undergone an archaeological inventory survey. Records also suggest that 60% of the property has undergone extensive alterations from agricultural activities. The remaining 40% of the property contains remnants of the former Waine'e camp/village. At least three LCA claims, or portions of LCA claims exist on the parcel as well.

Given the above information, we recommend that an archaeological inventory survey be conducted, focusing on the area containing remnants of Waine'e village and the former LCA claims. We can then determine whether significant historic sites are present, and, if so, we can recommend appropriate mitigation conditions.

Should you have questions, please contact Dr. Melissa Kirkendall (Maui/Lana'i SHPD 243-5169).

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

MK:an

cc: John Min, Director, Department of Planning, County of Maui, FAX 270-7634
Bert Ratte, County of Maui, Land Use and Codes, FAX 270-7972

DEPARTMENT OF
PARKS AND RECREATION
COUNTY OF MAUI

1580-C KAAHUMANU AVENUE
WAILUKU, HAWAII 96793

JAMES "KIMO" APANA
Mayor

FLOYD S. MIYAZONO
Director

ELIZABETH D. MENO
Deputy Direct

Office 808-270-7230
Fax 808-270-793

September 1, 2000

Michael T. Munekiyo, A.I.C.P.
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street Suite 104
Wailuku, Hawaii 96793

RE: **Proposed West Maui Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project**

Dear Mr. Munekiyo:

Thank you for the opportunity to review and comment on the proposed West Maui Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project.

We would like to express our support for this project and look forward to reviewing the Draft Environmental Assessment when it is made available.

Should you have any questions or need of further information, please call me or Patrick Matsui, Chief of Parks Planning & Development at 270-7931.

Sincerely,

Floyd S. Miyazono
Director

FSM:PTM:rh

c: Patrick Matsui, Chief of Parks Planning & Development

SEP 2 1 2000

JAMES "KIMO" APANA
MAYOR

OUR REFERENCE

YOUR REFERENCE

POLICE DEPARTMENT
COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
Fax (808) 244-6411

THOMAS M. PHILLIPS
CHIEF OF POLICE

KEKUHAUPIO R. AKANA
DEPUTY CHIEF OF POLICE

September 19, 2000

MEMORANDUM

TO : MICHAEL T. MUNEKIYO, A.I.C.P.
Munekiyo, Arakawa & Hiraga, Inc.

FROM : THOMAS M. PHILLIPS, CHIEF OF POLICE
Maui Police Department

SUBJECT : PROPOSED WEST MAUI KA HALE A KE OLA HOMELESS RESOURCE CENTER & LONG-TERM RENTAL HOUSING PROJECT

____ No recommendation or special condition is necessary or desired.

__X__ Refer to attachment.

Acting Assistant Chief Sydney Kikuchi
For: THOMAS M. PHILLIPS
Chief of Police

Attachment

TO	:	**THOMAS PHILLIPS, CHIEF OF POLICE**
VIA	:	**WAYNE RIBAO, CAPTAIN, DISTRICT IV**
FROM	:	**KAID K. THOMPSON, POLICE OFFICER III BICYCLE PATROL, DISTRICT IV**
SUBJECT	:	**WEST MAUI KA HALE A KE OLA , HOMELESS RESOURCE CENTER AND LONG-TERM RENTAL HOUSING PROJECT**

In regards to the proposed Homeless Resource Center by Ka Hale A Ke Ola, at the area formerly occupied by the Wainee Camp, with the information that was provided, the site location is a good one.

Safety information that should be considered:

1) Adequate sidewalks to and from the proposed site to the area of the Aquatic Center should be considered. The main transportation of the homeless people is by foot.

2) Security personnel for the facility to up-hold house rules.

3) Counselors and programs to implement these people back into the main stream of society. Helping them become self sufficient.

The Homeless situation across Maui and Hawaii is a growing one. An organization such as Ka Hale A Ke Ola is a welcomed one. The community can only benefit from these organizations and their programs.

Noted

7000
9/18/00

Kaid K. THOMPSON E-0307
Police Officer III,
Bicycle Patrol, District IV
09/15/00 1000 hours.

CONCUR WITH OFC. THOMPSON, HOWEVER THE POINTS TO BE CONSIDERED ARE VALID.

09/18/00

AC
09-18-00

"JAMES "KIMO" APANA
Mayor

CHARLES JENCKS
Director

DAVID C. GOODE
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT
200 SOUTH HIGH STREET
WAILUKU, HAWAII 96793

RALPH NAGAMINE, L.S., P.E.
Land Use and Codes Administration

RON R. RISKA, P.E.
Wastewater Reclamation Division

LLOYD P.C.W. LEE, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

ANDREW M. HIROSE
Solid Waste Division

September 25, 2000

Mr. Michael T. Munekiyo
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

SUBJECT: EARLY CONSULTATION
KA HALE A KE OLA HOMELESS RESOURCE CENTER
TMK: (2) 4-6-015:001 (PORTION)

We have reviewed the subject request and offer the following comments.

1. Off-street parking, loading spaces, and landscaping shall be provided per Maui County Code, Chapter 19.36.

2. Public Law 101-336, Americans with Disabilities Act -- Title III, requires all places of public accommodation and commercial facilities be accessible to people with disabilities.

3. The developer should be informed that we cannot ensure that wastewater system capacity will be available for the project.

4. Wastewater contribution calculations are required before a building permit is issued.

5. The developer is required to fund any necessary off-site improvements to collection system and wastewater pump stations.

6. A detailed and final drainage report and a Best Management Practices (BMP) plan shall be submitted with the grading plans for review and approval prior to issuance of grading permits. The drainage report shall include hydrologic and hydraulic calculations and the schemes for disposal of runoff waters. It must comply with the provisions of the

"Rules and Design of Storm Drainage Facilities in the County of Maui" and must provide verification that the grading and runoff water generated by the project will not have an adverse effect on adjacent and downstream properties. The BMP plan shall show the location and details of structural and non-structural measures to control erosion and sedimentation to the maximum extent practicable.

7. The initial and subsequent phases appear to be of a scale that will (traffic) impact the intersection of Honoapiilani Highway and Shaw Street as well as Shaw Street itself. The most sensitive issue would be the increased traffic through Shaw Street between the swimming pool complex and youth recreational facilities on the other side of the street. Also, there are other ball field facilities planned mauka of the youth center. How will the project traffic affect pedestrians frequenting the various recreational sites? Therefore, the applicant shall construct traffic improvements to be determined by a Traffic Impact Analysis Report (TIAR). A detailed TIAR for the entire subdivision shall be submitted for our review and approval.

If you have any questions regarding this letter, please call me at 270-7845.

Sincerely,

DAVID GOODE
Director of Public Works
and Waste Management

DG:sn/mt
S:\LUCA\CZM\kahaleak.ola.wpd

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director

OCT 0 6 2000

COUNTY OF MAUI
DEPARTMENT OF PLANNING

October 4, 2000

Mr. Michael T. Munekiyo, AICP
Project Manager
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

RE: Preliminary Consultation for an Environmental Assessment (EA) for the Proposed West Maui Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project, on Five Acres at Tax Map Key: 4-6-015:Portion of 001, Lahaina, Maui, Hawaii

The Maui Planning Department received your request for preliminary consultation for the above subject EA and has no comments at this time. The proposed development is in the State Agricultural District. The West Maui Community Plan designates this area Single Family and Agriculture and the zoning is Interim. The zoning is in the Interim district because of the inconsistency in State Land Use Commission District and Community Plan land use designations. It should be noted that as part of the North Beach development, AmFac was required to provide 13 acres of park land adjacent to the West Maui Recreational Complex. The proposed housing development is outside this area.

We also understand that the final subdivision approval was granted on August 30, 2000, by the Department of Public Works and Waste Management for the five (5) acre site.

If you have any further questions, please call Ms. Julie Higa, Staff Planner, of this office at 270-7814.

Very truly yours,

JOHN E. MIN
Planning Director

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
PLANNING DIVISION (808) 270-7735; ZONING DIVISION (808) 270-7253; FACSIMILE (808) 270-7634

JEM:JH:cmb
c: Clayton Yoshida, Deputy Director of Planning
Julie Higa, Staff Planner
Project File
General File
S:\ALL\JULIE\ENVIRONM\westmaui.hsg.wpd

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director

OCT 16 2000

COUNTY OF MAUI
DEPARTMENT OF PLANNING

October 12, 2000

Mr. Michael Munekiyo, AICP
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

RE: PRELIMINARY CONSULTATION FOR AN ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED WEST MAUI KA HALE A KE OLA HOMELESS RESOURCE CENTER AND LONG-TERM RENTAL HOUSING PROJECT ON FIVE (5) ACRES AT LAHAINA, MAUI, HAWAII; TMK: 4-6-015:PORTION OF 001

The Maui Planning Department (Department) received your request for preliminary consultation for the above subject EA and noted that the zoning is Interim District because of the inconsistency in State Land Use Commission District and Community Land Use Designation. However, in this case the Department was incorrect. The Land Zoning Map No. 8, was approved by Ordinance No. 297 on May 10, 1961, which granted agricultural zoning prior to the adoption of the State Land Use Commission District Boundaries. On that basis, although the zoning is inconsistent with the West Maui Community Plan Single-Family Residential Land Use Designation, the policy of the County is to recognize the lower density zoning of Agricultural.

The Department apologizes for any inconvenience. If you should have any further questions, please contact Ms. Julie Higa, Staff Planner, of this office at 270-7735.

Very truly yours,

JOHN E. MIN
Planning Director

JEM:JMH:cmp
c: Clayton Yoshida, AICP, Deputy Planning Director
Julie Higa, Staff Planner
Project File
General File S:\ALL\JULIE\ENVIRONM\westmaui\prelimcons.correction.wpd

RESPONSES

MUNEKIYO, ARAKAWA & HIRAGA, INC.

September 7, 2000

Denis R. Lau, P.E., Chief
Clean Water Branch
Department of Health
P. O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project

Dear Mr. Lau:

Thank you for your August 28, 2000 letter providing comments on the subject project.

On behalf of Ka Hale A Ke Ola, we would like to note that the Corps of Engineers will be contacted to determine whether a Department of Army permit will be required for the project. In addition, an application for a NPDES general permit will be submitted to the department for review and approval as applicable.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:lfm
cc: Charles Ridings, Ka Hale A Ke Ola
Warren Unemori, Warren S. Unemori Engineering, Inc.
kahale\wmaui\doh\cwb.ltr

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

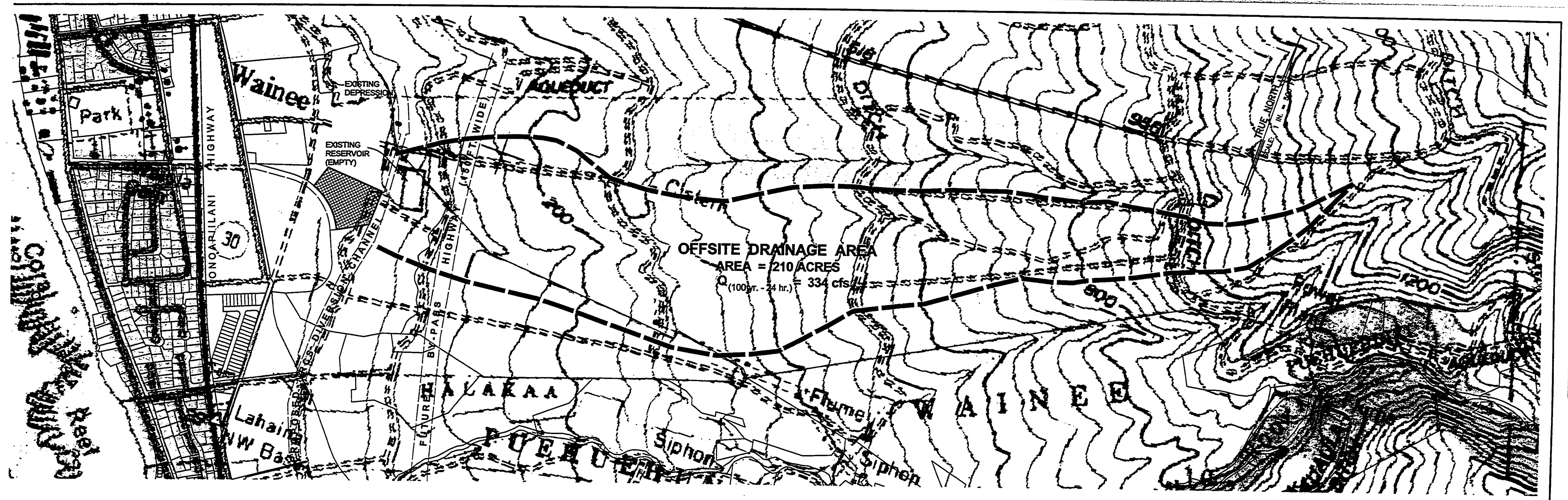


EXHIBIT 4 - OFFSITE DRAINAGE AREA

0 500 1000 1500 2000

SCALE: 1 IN. = 500 FT.

WARREN S. UNEMORI ENGINEERING, INC.
CIVIL & STRUCTURAL ENGINEERS / LAND SURVEYORS

October 10, 2000

11"x30"

100 B

MUNEKIYO, ARAKAWA & HIRAGA, INC.

September 8, 2000

Don Hibbard, Administrator
State Historic Preservation Division
Dept. of Land and Natural Resources
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

Subject: Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project

Dear Mr. Hibbard:

Thank you for your September 1, 2000 letter providing comments on the subject project. On behalf of Ka Hale A Ke Ola, we would like to note that an archaeological inventory survey of the project site is currently being prepared in support of the project's Section 201G-118, HRS application.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Charles Ridings, Ka Hale A Ke Ola
Erik Fredricksen, Xamenek Researches
kahalelwmauicthibbard.ltr

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

Chapter XI

Letters Received During the Draft Environmental Assessment Public Comment Period and Responses to Substantive Comments

XI. LETTERS RECEIVED DURING THE DRAFT ENVIRONMENTAL ASSESSMENT PUBLIC COMMENT PERIOD AND RESPONSES TO SUBSTANTIVE COMMENTS

Pursuant to the requirements of the environmental review process, letters received during the Draft Environmental Assessment public comment period, as well as responses to substantive comments, are included in this section.

DRAFT ENVIRONMENTAL ASSESSMENT COMMENT LETTERS

OCT 0 4 2000

DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF

October 2, 2000

Regulatory Branch

Mr. Michael T. Munekiyo, A.I.C.P.
Project Manager
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

This letter responds to your request for comments on the draft Environmental Assessment (EA) for the West Side Resource Center, dated September 21, 2000. Based on the information contained in the draft EA I have determined that a Department of the Army (DA) permit will not be required for this activity, since there are no waters of the United States in the project area.

If you have any questions concerning this determination, please contact William Lennan of my staff at 438-6986 or FAX 438-4060, and reference File No. 990000293.

Sincerely,

George P. Young, P.E.
Chief, Regulatory Branch

BENJAMIN J. CAYETANO
GOVERNOR

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

BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

OCT 0 4 2000

In reply, please refer to:
EMO/CWB

10001PKP.00

October 2, 2000

Mr. Glenn Tadaki
Planner
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

Subject: West Side Resource Center

The Department of Health, Clean Water Branch has reviewed the draft environmental assessment for the subject project and has no further comments at this time. The Department has already commented on the subject project in our letter dated August 28, 2000.

Should you have any questions, please contact Ms. Kris Poentis, Engineering Section of the Clean Water Branch, at (808) 586-4309.

Sincerely,

DENIS R. LAU, P.E., CHIEF
Clean Water Branch

BENJAMIN J. CAYETANO
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
MAUI DISTRICT
650 PALAPALA DRIVE
KAHULUI, HAWAII 96732

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

October 3, 2000

IN REPLY REFER TO:
HWY-M2.333-00

MEMORANDUM

TO: **Glenn Tadaki**
Munekiyo, Arakawa & Hiraga, Inc.

FROM: **Robert O. Siarot**
State Highways

SUBJECT: West Side Resource Center
ME 00-64

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the subject project. At this point, we do not have any comments to offer. However, please submit the traffic impact analysis report and construction plans for review.

If there are any questions or concerns, please contact me or Paul M. Chung at 873-3535.

/pmc

DEPARTMENT OF
PARKS AND RECREATION
COUNTY OF MAUI

1580-C KAAHUMANU AVENUE
WAILUKU, HAWAII 96793

Mayor

FLOYD S. MIYAZONO
Directo

ELIZABETH D. MENOR
Deputy Directo

Office 808-270-7230
Fax 808-270-7934

October 4, 2000

Glenn Tadaki, Planner
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street Suite 104
Wailuku, Hawaii 96793

RE: **Draft Environmental Assessment**
West Maui Resource Center

Dear Mr. Tadaki:

Thank you for the opportunity to review the Draft Environmental Assessment for the West Maui Resource Center.

We would like to express our continued support for this project. Upon review of the Draft Environmental Assessment, we have the following comment to offer.

> Under Section II, ***Description Of The Existing Environment***, Page 15, Number 8, **Noise Characteristics**, it should be noted that the Lahaina Recreation Center Expansion, currently under construction, is expected to generate significant noise. The expansion, which abuts the proposed West Maui Resource Center, consists of lighted ballfields. These fields are anticipated to be heavily used during the day and also in the evenings.

Should you have any questions or need of further information, please call me or Patrick Matsui, Chief of Parks Planning & Development at 270-7931.

Sincerely,

Floyd S. Miyazono
Director

FSM:PTM:rh

c: Patrick Matsui, Chief of Parks Planning & Development

s:\planning\rh\green\west side resource center 2.wpd

OCT 1 1 2000

BENJAMIN J. CAYETANO
GOVERNOR

ESTHER UEDA
EXECUTIVE OFFICER

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
P.O. Box 2359
Honolulu, HI 96804-2359
Telephone: 808-587-3822
Fax: 808-587-3827

October 9, 2000

Mr. Glenn Tadaki
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

Subject: Draft Environmental Assessment (DEA) for the West Side Resource Center, Lahaina, Maui, TMK 6-6-15: por. 1

We have reviewed the DEA for the subject project transmitted by your letter dated September 21, 2000, and have the following comments:

1) We confirm that the subject property, as represented on the Project Location Map, is designated within the State Land Use Agricultural District.

2) The DEA (page 9 & appendix B) states that the subject project will be implemented through §201G-118, Hawaii Revised Statutes (HRS), as coordinated with the County Department of Housing and Human Concerns, and as such exemptions from certain regulatory and statutory requirements, including an exemption from a State land use district boundary amendment, are being requested.

   Please be advised that it is not our understanding that §201G-118, HRS, provides for an exemption of a housing development from the boundary amendment process.

We have no further comments to offer at this time. We appreciate the opportunity to comment on the subject DEA.

Should you have any questions, please feel free to call me or Bert Saruwatari of our office at 587-3822.

Sincerely,

ESTHER UEDA
Executive Officer

EU:aa

c: OEQC
County of Maui Planning Dept.
County of Maui Dept. of Housing and Human Concerns

BENJAMIN J. CAYETANO
GOVERNOR

BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

[redacted]
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, MAUI, HAWAII 96793

OCT 12 2000

October 10, 2000

Mr. Glenn Tadaki
Planner
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Tadaki:

SUBJECT: **West Side Resource Center**
TMK: (2) 4-6-15:por. 01

Thank you for the opportunity to comment on the draft environmental assessment. We have no comments to offer at this time.

Should you have any questions, please call me at 984-8230.

Sincerely,

HERBERT S. MATSUBAYASHI
District Environmental Health Program Chief

JAMES "KIMO" APANA
MAYOR

OUR REFERENCE
YOUR REFERENCE tv

POLICE DEPARTMENT
COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
Fax (808) 244-6411

THOMAS M. PHILLIPS
CHIEF OF POLICE

KEKUHAUPIO R. AKANA
DEPUTY CHIEF OF POLICE

October 13, 2000

Mr. Glenn Tadaki
Planner
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Mr. Tadaki:

SUBJECT: West Side Resource Center, TMK: 4-6-15:por. 01

Thank you for your letter of September 21, 2000 requesting comments on the above subject.

We have reviewed the proposed summary and have enclosed our comments and recommendations. Thank you for giving us the opportunity to comment on the proposed project.

Very truly yours,

Assistant Chief Robert Tam Ho
for: Thomas M. Phillips
Chief of Police

Enclosure

c: John E. Min, Planning Department

TO : THOMAS PHILLIPS, CHIEF OF POLICE

VIA : CHANNELS

FROM : KAID K. THOMPSON, POLICE OFFICER III
BICYCLE PATROL, DISTRICT IV

SUBJECT : WEST MAUI, KA HALE A KE OLA, HOMELESS RESOURCE CENTER

After reviewing the information within the packet there is no mention of the features that would secure the safety of the public and these homeless people. The three issues that should be considered in this project is:

1) Adequate road and sidewalk conditions from the main road at the West Maui Aquatic Center to Ka Hale A Ke Ola center. The homeless people usually walk to and from their destinations.

2) Security personnel for the facility.

3) Counselors and programs to implement these people back into society.

Ka Hale A Ke Ola is an organization that can help the homeless situation in Lahaina. The public can only benefit from this facility if done right.

Respectfully submitted.

Kaid K. THOMPSON E-0307
Police Officer III,
Bicycle Patrol, District IV
10/10/00 1930 hours.

10/12/00

10/12/00
THE HOMELESS SITUATION ON THE WEST SIDE CAN ONLY BENEFIT FROM THIS PROPOSED PROJECT.

BENJAMIN J. CAYETANO
GOVERNOR

GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

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

October 18, 2000

Alice Lee
Department of Housing & Human Concerns
200 South High Street
Wailuku, HI 96793

Dear Ms. Lee:

Subject: Draft Environmental Assessment (EA) for **West Side Resource Center**

We have the following comments to offer:

1. Agency contacts:

The draft EA notes that several technical reports will be appended to the 201G-118 application. The information contained in these reports is required for a complete review of this project. This is especially true for the local offices of agencies mandated with the responsibility for these technical programs and activities.

The review of this project cannot be deemed complete without full information on all of its aspects. Send copies of the following reports to the agencies noted below and allow agency reviewers sufficient time to review them in conjunction with the draft EA and provide written comments:

a.: *Archeological survey*: Submit a copy of the completed survey to the State Historic Preservation Office, DLNR, as requested by the SHP Officer in his 9/1/2000 letter. Also enclose a copy of the report in the final EA.

b. *Traffic Impact Analysis Report*: Because of planned upgrades to Honoapiilani Highway, submit a copy of this report to the Department of Transportation/Maui Office and to the Maui Department of Public Works.

c. *Engineering Report*: Submit a copy to the Maui Department of Public Works for a thorough review of impacts to the wastewater system and for additional information on impacts to the drainage system. Send a copy also to the Maui Department of Water for its review of impacts to the water system.

Send copies of the reports to the Maui Planning Department, again allowing Planning staff enough time to review them along with the draft EA and submit written comments. In the final EA be sure to include a discussion of impacts and related mitigation measures.

2. Cultural impacts assessment: Enclosed is a copy of Act 50, passed by the Legislature in April of this year. This mandates an assessment of impacts to local cultural practices by the proposed project. In the final EA include such an assessment. For assistance in the preparation refer to our *Guidelines for Assessing Cultural Impacts*. Contact our office for a paper copy or go to our homepage at *http://www.state.hi.us/health/oeqc/guidance/cultural.htm*.

3. Sustainable Building Design: Please consider applying sustainable building techniques presented in the enclosed "Guidelines for Sustainable Building Design in Hawaii." In the final EA include a description of any of the techniques you will implement. Contact our office for a paper copy or go to our homepage at *http://www.state.hi.us/health/oeqc/guidance/sustainable.htm.*

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

Sincerely,

GENEVIEVE SALMONSON
Director

c: Charles Ridings, Ka Hale A Ke Ola
Michael Munekiyo

UNOFFICIAL VERSION

HOUSE OF REPRESENTATIVES
TWENTIETH LEGISLATURE, 2000
STATE OF HAWAII

H.B. NO. 2895 H.D. 1

A BILL FOR AN ACT

RELATING TO ENVIRONMENTAL IMPACT STATEMENTS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that there is a need to clarify that the preparation of environmental assessments or environmental impact statements should identify and address effects on Hawaii's culture, and traditional and customary rights.

The legislature also finds that native Hawaiian culture plays a vital role in preserving and advancing the unique quality of life and the "aloha spirit" in Hawaii. Articles IX and XII of the state constitution, other state laws, and the courts of the State impose on government agencies a duty to promote and protect cultural beliefs, practices, and resources of native Hawaiians as well as other ethnic groups.

Moreover, the past failure to require native Hawaiian cultural impact assessments has resulted in the loss and destruction of many important cultural resources and has interfered with the exercise of native Hawaiian culture. The legislature further finds that due consideration of the effects of human activities on native Hawaiian culture and the exercise thereof is necessary to ensure the continued existence, development, and exercise of native Hawaiian culture.

The purpose of this Act is to: (1) Require that environmental impact statements include the disclosure of the effects of a proposed action on the cultural practices of the community and State; and (2) Amend the definition of "significant effect" to include adverse effects on cultural practices.

SECTION 2. Section 343-2, Hawaii Revised Statutes, is amended by amending the definitions of "environmental impact statement" or "statement" and "significant effect", to read as follows:

""Environmental impact statement" or "statement" means an informational document prepared in compliance with the rules adopted under section 343-6 and which discloses the environmental effects of a proposed action, effects of a proposed action on the economic [and] welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.

The initial statement filed for public review shall be referred to as the draft statement and shall be distinguished from the final statement which is the document that has incorporated the public's comments and the responses to those comments. The final statement is the document that shall be evaluated for acceptability by the respective accepting authority.

"Significant effect" means the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State's environmental policies or long-term environmental goals as established by law, or adversely affect the economic [or] welfare, social welfare[.], or cultural practices of the community and State."

SECTION 3. Statutory material to be repealed is bracketed. New statutory material is underscored.

SECTION 4. This Act shall take effect upon its approval.

Approved by the Governor as Act 50 on April 26, 2000

OCT 2 5 2000

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-7109
Telephone (808) 270-7816 • Fax (808) 270-7833

October 19, 2000

Mr. Glenn Tadaki
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku Maui, HI 96793

Re: Project Name: West Side Resource Center
TMK: 4-6-15:Por. 1

Dear Mr. Tadaki,

Thank you for the opportunity to review this application. The Department of Water Supply has the following comments.

A 12-inch waterline is located along Mill Street about 1000 feet from the property. It is our understanding that the project will ultimately involve 42 dormitory beds plus 78 additional housing units including a resource center, a maintenance facility, short term and long term dormitories, a laundry and child care facility, all to be developed in phases. A master plan of the potential domestic and irrigation demand should be planned in advance so to properly size the water meter and meter box.

Based on (per-acre) standards, consumption for the project is estimated at about 30,500 gpd depending on irrigation demand. The report indicates a separate meter to be used for each facility. Instead, the applicant should discuss this matter with our engineering division to plan an alternative solution. Typically a master meter or a bank of master meters are designed to facilitate the entire build-out of the property.

Fire protection and water service will be required in accordance to standards. Fireflow, irrigation and domestic calculations will be required during the building permit process. The applicant should be aware that no guarantee of additional water is granted or implied as a result of these comments. Water availability is determined at the time of meter application. Prior to development, we suggest you contact our engineering division at 270-7835 to discuss this matter.

"By Water All Things Find Life"

This project overlies the Launipoko Aquifer which has a sustainable yield of 8 mgd. In order to protect this aquifer, DWS recommends that the applicant utilize Best Management Practices (BMP"s) designed to minimize infiltration from all construction, processing and vehicle operations. We have attached sample BMP's for principle operations for reference. Additional information is available from the State Department of Health.

We ask the applicant to consider conservation measures in and around the property. Some of these measures are listed for your use.

Utilize Low-Flow Fixtures and Devices: Maui County Code Subsection 16.20A.680 requires the use of low-flow water fixtures and devices in faucets, showerheads, urinals, water closets and hose bibs. Water conserving washing machines, ice makers, and other units are also available.

Maintain Fixtures to Prevent Leaks: A simple, regular program of repair and maintenance can prevent the loss of hundreds or even thousands of gallons a day. Refer to the attached handout, "The Costly Drip." The applicant should establish a regular maintenance program.

Use Climate-adapted Plants: The project site is located in the "Maui County Planting Plan" - Plant Zone 3. Native plants adapted to the area, conserve water and further protect the watershed from degradation due to invasive alien species.

Prevent Over-Watering By Automated Systems: Provide rain-sensors on all automated irrigation controllers. Check and reset controllers at least once a month to reflect the monthly changes in evapotranspiration rates at the site. As an alternative, provide the more automated, soil-moisture sensors on controllers.

Look for Opportunities to Conserve Water: A few examples of these actions are as follows - When clearing driveways, etc. of debris, use a broom instead of a hose. When washing cars, use a hand-operated spray nozzle instead of an open hose. Additionally, check for leaks in faucets and toilet tanks.

If you need more information, please contact our Water Resources and Planning Division at 270-7199.

Sincerely,

David R. Craddick
Director
rs

C: Engineering division

1) "The Costly Drip"
2) "Saving Water in the Yard - What and How to Plant in Your Area"
3) Ordinance 2108 - "An ordinance amending Chapter 16.20 of the Maui County Code, pertaining to the plumbing code"

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-7109
Telephone (808) 270-7816 • Fax (808) 270-7833

October 19, 2000

Mr. Glenn Tadaki
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku Maui, HI 96793

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TMK: 4-6-15:Por. 1

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If you need more information, please contact our Water Resources and Planning Division at 270-7199.

Sincerely,

David R. Craddick
Director
rs

C: Engineering division

1) "The Costly Drip"
2) "Saving Water in the Yard - What and How to Plant in Your Area"
3) Ordinance 2108 - "An ordinance amending Chapter 16.20 of the Maui County Code, pertaining to the plumbing code"

OCT 2 4 2000

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
P.O. BOX 1109
WAILUKU, MAUI, HAWAII 96793-7109
Telephone (808) 270-7816 • Fax (808) 270-7833

October 23, 2000

Mr. Glenn Tadaki
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku Maui, HI 96793

Re: Project Name: West Side Resource Center
TMK: 4-6-15:Por. 1

Dear Mr. Tadaki,

After reviewing your Preliminary Engineering Report Dated October 20, 2000, our comment letter to your office dated October 19, 2000 has not changed. Attached is a copy of this letter for your use.

Should you need more information, please contact our Water Resources and Planning Division at 270-7199.

Sincerely,

David R. Craddick
Director
rs

FAX

DATE: 10/23/00

TO: FAX No: 244-0821
Ka Hale A Ke Ola, Applicant
Attention: Charles Ridings

FROM: Buck Buchanan
Phone/Fax: 661-9044

SUBJECT: West Side Resource Center
TMK: 4-6-6; por. 01

Aloha,

The absence of any public hearing or legal notice concerning the proposed project offends the spirit of both the Maui General Plan and the West Maui Community Plan.

> **Public participation in the continuing planning process is necessary to insure that right directions are taken and overall objectives are met.**
> •Maui County General Plan (1990 Update Effective September 27, 1991), Implementation item d.

This proposal purports to help West Maui people and assist in meeting some of the goals of the General and Community Plans. Therefore, all the people of this community should be informed and provided the opportunity to comment in public before steps are taken that effectively foreclose the public's rights to full and open participation. The Applicant and the Maui County Administration must promptly rectify this grievous offense to our General and Community Plans.

The Draft Environmental Assessment dated September 2000 (DEA) is erroneous in several regards:

- Impacts to Roadways (DEA page 30) states "...traffic related to the project's... residents will be limited and is not expected to significantly impact the level of service at the Honoapiilani Highway/Shaw Street intersection." However, Figure 5 of the Preliminary Engineering Report for the purposed project (October 2000) reflects 154 parking stalls and the DEA on page 30 states that the Applicant's experience with a project in Wailuku "indicates" vehicle ownership among the project's residents would be in range of 90 to 103.
  Expectations and indications in a totally different locale are not sufficient to determine traffic impact from this proposal.

- The DEA at page 18 shows 22,633 residents are projected for West Maui by 2010.
  However, the West Maui Community Plan clearly shows that it requires the use of a "constrained" growth process which projects 21,149 residents in 2010, not an "unconstrained" growth projecting 22,633.

FAX

DATE: 10/23/00

TO: FAX No: 244-0821
Ka Hale A Ke Ola, Applicant
Attention: Charles Ridings

FROM: Buck Buchanan
Phone/Fax: 661-9044

SUBJECT: West Side Resource Center
TMK: 4-6-6; por. 01

Aloha,

The absence of any public hearing or legal notice concerning the proposed project offends the spirit of both the Maui General Plan and the West Maui Community Plan.

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> •Maui County General Plan (1990 Update Effective September 27, 1991), Implementation item d.

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  However, the West Maui Community Plan clearly shows that it requires the use of a "constrained" growth process which projects 21,149 residents in 2010, not an "unconstrained" growth projecting 22,633.

- The DEA at page 19 states. "...the Napili Fire Station located adjacent to the project site."
  Preposterous! The Napili Fire Station is over 10 miles north of Shaw Street and the proposed project site.

I'm confused. The Applicant is known to accept only certain "qualified" persons in its Wailuku facilities; and Mr. Ridings so stated to a few invited people in Lahaina on September 27 of this year. Yet the DEA on page 29 states that those programs will provide a system to "assist graduates of the project's ... program, as well as other families and individuals" to move toward self-sufficiency and independence. (emphasis added)
What is true? Will housing be available to all peoples in need, not only those accepted by the Applicant's process?

My information is that the proposed project is proceeding under HRS 201G-118, that it has a short time to qualify for some funding, and that it (along with other related matters) must be reviewed and acted upon by the Maui County Council in a public meeting before the proposal may become a reality. However, none of those matters excuse the failure to meet the provisions of the General and Community Plans. County Council action is not a planning process; much more, it does not occur as a part of the **"continuing planning process"** required by the General Plan language.

Please act promptly, act now, to inform and provide the people of West Maui the opportunity to comment in public on this proposal. The proposal can be, and should be, an important addition to the support system of this community. What is absolutely needed is the public's input **"to insure that right directions are taken and overall objectives are met"**.

With aloha, Jack Jedlauer

cc: Department of Housing & Human Concerns
Attention: Alice Lee, Director
FAX: 270-7165

Munekiyo, Arakawa & Hiraga, Inc.
Attention: Mike Munekiyo
FAX: 244-8279

Office of Environmental Quality Control
FAX: 1-808-586-4186

The Lahaina News
Attention: Mark Vieth, Editor
FAX: 667-2726

The Maui News
Attention: David Hoff, Editor-in-Chief
FAX: 242-9087

F A C S I M I L E

TO:	KA HALE A KE OLA	SENDER'S FAX:	661-0438
ATTENTION:	CHARLES RIDINGS	NO OF PAGES:	1
FAX NUMBER:		DATE:	10/23/00
FROM:	JIM PECK	RE:	West Side Resource Center

MESSAGE:

I would like to comment on the Draft Environmental Assessment report dated September 2000 prepared for the West Side Resource Center.

The report does a good job in describing the proposed development, its location, physical description, and the need the West Side Community has for such a development. It seems to me however, that the environmental issues are treated very lightly.

I am particularly concerned with the problem of flooding. The proposed development is near the site of the flood that occurred a few years ago that caused considerable damage here in Lahaina. I believe that the County is still in the process of settling claims with some of the residents. The proposed development is clearly at risk from flooding from storm waters coming from the mauka lands.

Amfac-JMB has abandoned the sugar land they farmed for many years just mauka of this site. This has resulted in problems with blowing dust and potential agriculture chemical pollution from this land. Does this not warrant an environmental assessment of the risk to the development?

The Environmental Notice I received states "Development of the project will be implemented through Section 201G-188, HRS, a fast-track review process that facilitates the development of affordable housing." Surely this does not mean that this development can move forward until the environmental issues are understood. Right or wrong the term "fast-track" causes me to worry. Is the development process moving ahead in an open manner? I sense that the public is not fully aware of the status of the planning of this development. This can create problems for everyone in the future.

Respectfully submitted.

Jim Peck

CC M.Munekiyo - 244-8729
Alice Lee

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director

NOV 0 2 2000

COUNTY OF MAUI
DEPARTMENT OF PLANNING

October 24, 2000

Mr. Michael T. Munekiyo, AICP
Project Manager
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

RE: Draft Environmental Assessment (EA) for the Proposed West Maui Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project, on Five Acres of Land, at Tax Map Key: 4-6-015:Portion of 001, Lahaina, Maui, Hawaii

The Maui Planning Department (Department) has reviewed the Draft Environmental Assessment for the West Side Resource Center. The proposed development is located to the east of Shaw Street and the Lahaina Recreational and Aquatic Centers and was previously occupied by Wainee Village, a former plantation camp demolished in October 1999. The property is located in the State Land Use Commission Agricultural District. The West Maui Community Plan land use map designates the property Agricultural and Single-Family Residential. The zoning is Agricultural. The applicant intends to file Section 201G-118, Hawaii Revised Statues (HRS), as amended, exemption from all statutes, ordinances, charter provisions, and rules of any governmental agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of units from the Maui County Council.

The applicant is proposing to build a resource center for the emergency and transitional housing for the homeless and long-term affordable housing for the low income residents of West Maui. The first phase will have three buildings:

1. A one-story resource center with offices, kitchen, dining, bathroom classroom, storage, security, and meeting/conference facilities, and 42 dormitory beds for emergency housing;

2. A two-story building consisting of 8 studios and 8 two-bedroom apartment units for emergency/transitional housing; and

3. A two-story building including 10 two-bedroom apartment units for long-term affordable rental housing.

Future phases will include four more buildings consisting of:

1. Two buildings consisting of 16 studio and 16 two-bedroom apartment units for transitional housing;

2. Two buildings consisting of 20 two-bedroom apartment units for *long-term affordable housing; and*

3. A child day care center if circumstances warrant.

In general, the Department believes that the exemptions listed in Appendix B should be identified in the text of the Draft EA, and any impacts and mitigative measures regarding the exemptions should be discussed in the respective sections. The Department has the following specific comments on the Draft EA:

1. *Archaeological Resources (Pages 14, 25, 26, 45, and 55).* The applicant states that the archaeological inventory survey of the site is in the process of being prepared and will be included in the project's Section 201G-118, HRS application. This survey report should be included in the Draft EA in order for the Department and the public to comment on any sites, if any, that may be identified prior to the publication of the Final EA. In addition, as noted, the subject site is part of the former Wainee Village, in which all of the homes were demolished. The Maui County Cultural Resources Commission (CRC) requested that an oral history for the area be completed and that AmFac periodically provide a status report on the progress of this oral history. In addition, the CRC had concerns for the large mature trees on the property. AmFac assured the CRC that the trees would not be removed and only the houses would be demolished. The Draft EA should discuss the status of the trees and any effort by the applicant to retain the trees on site.

2. *Population and Housing (Pages 18, 29, 30, and 56).* The Draft EA should include U.S. Census demographic information and other demographic data that identify the type of household that would be served. The demographic information, including length of residency in the region, could also identify and determine any

impacts on existing resources and facilities, if residents are moving from other areas of the County, State, or from outside the state.

3. *Schools and Recreational Facilities (Pages 20, 21, 56, and Appendix B).* Based on the demographic information from the current Wailuku Resource Center, what is the length of residency on the island? How many are new residents and what are their ages? How many children are transfers from another district? What effect will they have on the current educational and recreational facilities in the area? No enrollment and capacity data were provided for all of the schools in the area. Will there be any recreational facilities onsite for small children? What traffic improvements will be made for residents to access the recreational facilities? Will children be walking to any schools?

4. *Land Use and Community Character (Pages 16, 17, 27, 28, and Appendix B).* If the applicant is requesting a waiver of the parking requirements, the proposed plan for providing parking, its impacts, and mitigative measures should be discussed. The adjacent property is designated single-family in the Community Plan. Will the applicant provide a buffer between their proposed apartment development and the adjacent single-family designated area?

5. *Medical Facilities (Pages 5, 19, 20, 29, 56, and 57).* The applicant states that there will be a continuum of care, however, no medical services are provided. Many of the clients probably do not have private medical insurance. Where will these clients receive medical care and services in West Maui? Page 5 of the report states that the homeless population in the West Side may have a higher percentage of substance abusers than the homeless residents historically served by Ka Hale A Ke Ola (25 to 37 percent of the adult homeless population). In addition, it should be noted that studies have shown that more than half of the homeless population suffer from mental illness. Where will this population be receiving mental health services?

6. *Air Quality (15, 27, 52, 57, and 58).* The applicant states that project-related emissions are not expected to adversely impact local and regional ambient air quality conditions. Will trees and other landscaping in and around the property line help to reduce project-related emissions? Will the applicant be required to provide

the minimum trees required by Chapter 19.36 for the parking lots? Will there be landscaping around the buildings which also reduce dust and reduces heat?

7. *Noise (Pages 15, 27, 52, 57, and 58).* The Community Plan designates this area Single-Family Residential. The proposed development is Multi-Family. The adjacent area is designated Single-Family. Will the location and design of the proposed buildings and parking area provide a sufficient buffer between the proposed development and the area designated Single-Family? In addition, will there be any fencing and landscaping around the property line?

8. *Roadways and Traffic (Pages 21, 22, 30, 31, and Appendix B).* No mention is made of Mill Street, which is a roadway running parallel to Honoapiilani Highway behind the Lahaina Aquatic and Recreational Centers. Will improvements be necessary at the Mill Street and Shaw Street intersection? The applicant states that the current Wailuku facility population has about 0.5 vehicles per person while ownership among its transitional and long-term rental housing residents is about 1.0 and 1.2 vehicles per unit. Based on the assumption that the proposed development will have the same number of cars per unit and per person as the Wailuku facility, the total number of vehicles would be about 78 at build out. This figure should be identified in the Draft EA. Without a traffic impact analysis, comment on the impact and any mitigative measures are not known. What are the current levels of service at the Honoapiilani Highway and Shaw Street intersection? What effect will 78 vehicles have on right and left turns? Should there be a right-turn lane from Honoapiilani Highway to Shaw Street?

Will sidewalks and bikeways be provided for residents to walk or ride a bicycle to town, school, and recreational facilities? Appendix B identifying a list of exemptions indicates that sidewalks, curbs, gutters are proposed to be exempted. This should be identified in this section of the Draft EA and the impacts discussed. How many staff will be employed at the center? How much parking spaces will be provided onsite for residents and staff? Appendix B states that the applicant will request an exemption from Chapter 19.36. This information should be part of the text of the Draft EA and the impacts should be discussed.

The discussion in the report on roadways, impacts, and mitigative measures are general regional issues and are not site specific. Without the traffic impact analysis report, site specific impact and mitigative measures are not addressed. Any exemptions and its impacts, if any, should be discussed in the text of the Draft EA.

9. *Water and Wastewater Systems (Pages 22, 31, 32, 33 and Appendix B).* Currently, there are no County water or wastewater facilities serving the property. This is not mentioned in the Draft EA. The water system capacity and the length in which the water and sewer line will have to be extended to the proposed development should be identified and discussed. Any exemptions and its impacts, if any, should be discussed in the text of the Draft EA. The exemption list identifies an exemption to allow landscape irrigation for the project to connect with, and utilize water from the County water system.

10. *Drainage (Pages 24, 33, 34, and Appendix B).* There is no public drainage system serving the project site. The Draft EA states that a preliminary drainage report will be done at the time the 201G application is filed. The Draft EA provides a thorough discussion on the regional improvements to drainage, however, site specific drainage improvements and any related off-site drainage improvements should be identified and discussed and reviewed prior to the publication of the Final EA. The exemption list includes drainage exemption to allow soil percolation and 100 percent of the voids within rock envelopes to be used in satisfying required storage volumes. There is no discussion in the Draft EA on the impacts this would have on site and any regional impacts, if any.

If there are any questions, please call Ms. Julie Higa, Staff Planner, of this office at 270-7814.

Very truly yours,

JOHN E. MIN
Planning Director

JEM:JH:cmb
c: Clayton Yoshida, AICP, Deputy Director of Planning
Alice Lee, Director, Department of Housing and Human Concerns
Julie Higa, Staff Planner
Project File
General File
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BENJAMIN J. CAYETANO
GOVERNOR

NOV 15 2000

LEADING HAWAII INTO THE NEW MILLENNIUM
1959 2000+

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
MAUI DISTRICT
650 PALAPALA DRIVE
KAHULUI, HAWAII 96732

KAZU HAYASHIDA
DIRECTOR
HWY-M 2.369-00
DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

November 14, 2000

IN REPLY REFER TO:

Mr. Glenn Tadaki, Planner
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

SUBJECT: WESTSIDE RESOURCE CENTER
I.D. NO. ME-00-64

Thank you for the opportunity to review and comment on the Traffic Impact Analysis Report for the referenced project. Based on our review of the report, we offer the following comment:

Coordinate all future planned projects in the area into the analysis (i.e. baseball park expansion, etc.).

If you have any questions, please call Paul M. Chung at 873-3535.

Very truly yours,

for ROBERT O. SIAROT
District Engineer, Maui

PMC:dmf

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWELO
LINNEL NISHIOKA

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

November 20, 2000

Mr. Glen Tadaki
Munekiyo, Arakawa, & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

LOG NO: 26531 ✓
DOC NO: 0011CD19

Dear Mr. Tadaki,

SUBJECT: **Chapter 6E-42 Historic Preservation Review of the Draft Environmental Assessment for the Proposed West Side Resource Center**
Waine`e Ahupua`a, Lahaina District, Island of Maui
TMK: 3-9-15:001 por.

Thank you for the opportunity to review the Draft Environmental Assessment (Draft EA) for the proposed West Side Resource Center. Our review is based on reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the subject property.

Based on the submitted draft EA, we understand a portion of the proposed undertaking is to be located in lands formerly utilized for commercial sugar cane cultivation, while the remaining lands include a portion of the area previously occupied by the Waine`e Village, a plantation camp which developed in the early 1900s. The proposed undertaking is to consist of a homeless resource center thirty two - bedroom apartments.

The general area seems likely to have once been the location of pre-contact farming, perhaps with scattered houses, the REDI Realty Tax Atlas Tax Map Key indicates at least three LCA claims in the proposed project area. Use of the area continued into the plantation era of the early 20th century (the Waine`e Plantation Village). Given this information ,we believe it is likely that significant historic sites may be present in the proposed project area.

We have previously issued comments regarding the proposed undertaking (SHPD DOC NO: 0008MK11/LOG NO: 26096), at which time we recommended that an archaeological inventory survey be conducted focusing on the area containing remnants of Waine`e Village and the former LCA claims. As the proposed undertaking has not changed, our initial comments remain valid.

Please call Cathleen Dagher at 692-8023 if you have any questions.

Aloha,

Don Hibbard, Administrator
State Historic Preservation Division

CD:jen

JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director

NOV 2 7 2000

COUNTY OF MAUI
DEPARTMENT OF PLANNING

November 21, 2000

Mr. Michael T. Munekiyo, AICP
Project Manager
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

RE: Final Environmental Assessment (EA) for the Proposed West Maui Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project, on Five Acres of Land, Preliminary Engineering Report and Traffic Impact Analysis at Tax Map Key No.: 4-6-015:Portion of 001, Lahaina, Maui, Hawaii

The Maui Planning Department (Department) has reviewed the Preliminary Engineering and Drainage Report and the Traffic Impact Analysis. The Department understands that these reports will be discussed and incorporated into the Final Environmental Assessment for the West Side Resource Center.

Preliminary Engineering and Drainage Reports. The report states that a 60-foot roadway easement (1.5 acres) will be developed to provide access to the project site. Proposed improvements will include asphalt paved roadways, concrete curb, concrete sidewalks, and landscaping. Utility improvements will consist of underground sewer, drainage and water distribution systems and underground electrical, telephone and cable-television distribution systems. What is and how will the increase in runoff from the road improvements be handled?

Approximately 7.6 cfs is currently being generated by the project site. This surface runoff sheet flows across the site into an existing depression located above Mill Street and a former cane haul road. The post development peak runoff from the project site is approximately 22.7 cfs for a 50-year recurrence interval-1 hour duration storm. The proposed development will generate 15.1 cfs increases than the pre-development state. A storm drain system with catch basins spaced at appropriate locations throughout the site will be installed to direct runoff into onsite subsurface retention facilities. These retention facilities which consist of large diameter perforated

culverts located within the parking lots will be sized to retain the additional runoff generated by the project. The soil groups located on the property are clay, which is characterized as having slow runoff. What effect would this have with an onsite subsurface retention basin on maintenance? The applicant should also address the use of landscaped areas for additional retention to further reduce any offsite flows.

Traffic Impact Analysis Report. Table 2 and discussion in the report identifies the intensity as 90 beds for emergency/transitional housing and 30 affordable rental housing units. According to the description of the project, the total number of apartment/multi-family units is 78 and 42 beds for emergency dormitory-style living. In addition, based on the applicant's experience with the existing Kahului project, about 0.5 vehicles are owned by those using the emergency beds or 21 vehicles for the Westside facility and 1 to 1.2 vehicles are owned by the multi-family unit residence, or 39 vehicles for the West side facility, totaling 51 vehicles.

Thank you for the opportunity to comment on these reports and we look forward to reviewing and commenting on the Archaeological Report prior to the preparation of the Final Environmental Assessment.

If there are any questions, please call Ms. Julie Higa, Staff Planner, of this office at 270-7814.

Very truly yours,

JOHN E. MIN
Planning Director

JEM:JH:cmb
c: Clayton Yoshida, AICP, Deputy Director of Planning
Alice Lee, Director, Department of Housing and Human Concerns
Julie Higa, Staff Planner
Project File
General File
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JAMES "KIMO" APANA
Mayor

CHARLES JENCKS
Director

DAVID C. GOODE
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT
200 SOUTH HIGH STREET
WAILUKU, HAWAII 96793

RALPH NAGAMINE, L.S., P.E.
Land Use and Codes Administration

RON R. RISKA, P.E.
Wastewater Reclamation Division

LLOYD P.C.W. LEE, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

ANDREW M. HIROSE
Solid Waste Division

November 27, 2000

Mr. Glenn Tadaki
Munekiyo, Arakawa & Hiraga
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Tadaki:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT
KA HALE O KE OLA HOMELESS RESOURCE CENTER
TMK: (2) 4-6-015:001(PORTION)

We reviewed the subject draft environmental assessment and have the following comments.

1. The facility should be designed to double as an emergency shelter.

2. The Wastewater Reclamation Division cannot insure that wastewater system capacity will be available for this project.

3. The developer is required to fund any necessary off-site improvements to the collection system and wastewater pump stations.

4. Wastewater contribution calculations (gal/day) are required before a building permit is issued.

5. The summary and conclusion of the TIAR dated October 2000 states that the existing and future LOS for the intersection of Honoapiilani Highway and Shaw Street will operate at "D." When Shaw Street gets extended mauka with the West Maui Regional Park Expansion project, recommendations for the four-way stop can be coordinated at that time.

   Improving the LOS at Honoapiilani Highway and Shaw Street should be further investigated in coordination with the State Department of Transportation. Our final comments and recommendations would be based on final input by the State Department of Transportation.

6. Off-street parking, loading spaces, and landscaping shall be provided per Maui County Code Chapter 19.36.

7. Public Law 101-336, Americans with Disabilities Act – Title III, requires all places of public accommodation and commercial facilities to be accessible to people with disabilities.

8. A detailed final drainage report and a site specific erosion control plan shall be submitted with the construction plans for review and approval prior to the issuance of a grading or building permit. The drainage report shall include hydrologic and hydraulic calculations and the schemes for the disposal of runoff waters. It must comply with the provisions of the "Rules for Design of Storm Drainage Facilities in the County of Maui" and must provide verification that the grading and runoff water generated by the project will not have an adverse effect on adjacent and downstream properties. The site specific erosion control plan shall show the location and details of structural and non-structural Best Management measures.

9. We are holding our comments regarding proposed exemptions until a complete (i.e., preliminary plans with dimensions for structures and site improvements) 201G-118 package is presented. We are unable to assess impact to public health and safety of proposed exemptions without more detailed plans.

If you have any questions, please call me at 270-7845.

Sincerely,

DAVID GOODE
Director of Pubic Works
and Waste Management

DG:msc/mt

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JAMES "KIMO" APANA
Mayor

JOHN E. MIN
Director

CLAYTON I. YOSHIDA
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

December 5, 2000

Mr. Michael T. Munekiyo, AICP
Project Manager
Munekiyo, Arakawa & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Mr. Munekiyo:

RE: Archaeological Report - Final Environmental Assessment (EA) for the Proposed West Maui Ka Hale A Ke Ola Homeless Resource Center and Long-Term Rental Housing Project, on Five Acres of Land, Preliminary Engineering Report and Traffic Impact Analysis at Tax Map Key No.: 4-6-015:Portion of 001, Lahaina, Maui, Hawaii

The Maui Planning Department (Department) has reviewed the Archaeological Report prepared by Xamenek Researches. The Department understands that this report will be discussed and incorporated into the Final Environmental Assessment for the West Side Resource Center. The report identified one site (50-50-03-5042) which are two structural remnants of the former Wainee Village. This site qualified for significance under criterion "D" of the Federal and State historic preservation guidelines. However, the features yielded adequate information and was no longer considered significant for their information content. Xamanek's recommendation was that no further archaeological work is deemed necessary for the subject parcel.

Thank you for the opportunity to comment on these reports. If there are any questions, please call Ms. Julie Higa, Staff Planner, of this office at 270-7814.

Very truly yours,

JOHN E. MIN
Planning Director

JEM:JH:cmb
c: Clayton Yoshida, AICP, Deputy Director of Planning
Alice Lee, Director, Department of Housing and Human Concerns
Julie Higa, Staff Planner
Project File
General File
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DRAFT ENVIRONMENTAL ASSESSMENT RESPONSE LETTERS

MUNEKIYO, ARAKAWA & HIRAGA, INC.

October 20, 2000

Floyd Miyazono, Director
Department of Parks and
Recreation
County of Maui
1580-C Kaahumanu Avenue
Wailuku, Hawaii 96793

SUBJECT: West Side Resource Center

Dear Mr. Miyazono:

Thank you for your October 4, 2000 letter providing comments on the subject's Draft Environmental Assessment. On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

A review of the construction plans for the Lahaina Recreation Center Expansion Project indicated that two (2) ball fields and a playcourt, as well as parking, restroom, and ancillary improvements, are being provided. The driveway, parking lot, and playcourt for this new complex are located near its western boundary, about 50 feet to the east of Mill Street. A Pony/Sr. Little League ball field occupies the central portion of the parcel, while a Little League/softball field occupies the southern part of the site. With the exception of a small maintenance building, the northern portion of the property is free of structures. An excerpt from the West Side Resource Center's subdivision map (with the park expansion improvements superimposed) is attached for reference purposes.

The ball fields are sited in such a manner that their home plates are somewhat back to back and oriented toward the makai (west) part of the new sports complex, while the outfields are arrayed along the mauka (east) portion of the sports complex. Preliminarily, it appears the Little League/softball field will be the only ball field utilized for night games. Based on a review of the plans, two (2) light poles each are to be provided along the ball field's outfield, as well as along its first and third base foul lines.

environment

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

We acknowledge the foregoing improvements and associated recreational activities, and feel that the West Side Resource Center and Lahaina Recreation Expansion Project are compatible.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
Enclosure
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola

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MUNEKIYO, ARAKAWA & HIRAGA, INC.

October 30, 2000

Thomas Phillips, Chief of Police
Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawaii 96793

SUBJECT: West Side Resource Center

Dear Chief Phillips:

Thank you for your October 13, 2000 letter providing comments on the subject's Draft Environmental Assessment. On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

1. To provide access to the project site, a sidewalk and a 24-foot wide paved road will be constructed from Mill Street to the project site.

2. Security for the project will be provided on a continuous basis by Ka Hale A Ke Ola staff personnel.

3. The proposed project will provide job training programs, transportation services, a child day care facility, a substance abuse component, emergency food and housing, an intergenerational literacy program, and case management, referral, and counseling services, as well as transitional and long-term affordable rental housing. This system of vertically integrated programs, services, and facilities will assist families and individuals in the community move from a state of dependency and homelessness to self-sufficiency and independence.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
kahale\wmaui\c\mpdltr.001

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

MUNEKIYO, ARAKAWA & HIRAGA, INC.

October 30, 2000

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

SUBJECT: West Side Resource Center

Dear Ms. Salmonson:

Thank you for your October 18, 2000 letter providing comments on the subject's Draft Environmental Assessment (EA). On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

1. Copies of the project's archaeological inventory survey, traffic impact analysis, and preliminary engineering reports will be provided to the agencies outlined in your letter for their review and comment. Copies of these reports shall also be included in the subject's Final EA.

2. A cultural impact assessment shall be included in the subject's Final EA.

3. A copy of the *"Guidelines for Sustainable Building Design in Hawaii"* will be provided to the project's architect. The guidelines will be considered in connection with the preparation of architectural plans during the subject's detailed design phase.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
Enclosure
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
kahale\wmeu\rc\oeqc\tr.002

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

MUNEKIYO, ARAKAWA & HIRAGA, INC.

October 30, 2000

Buck Buchanan
416 Alio Street
Lahaina, Hawaii 96761

SUBJECT: West Side Resource Center

Dear Mr. Buchanan:

Thank you for your October 23, 2000 fax memorandum providing comments on the subject's Draft Environmental Assessment (EA). On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

1. We concur that community involvement is important in the project development process. In keeping with your suggestions, therefore, a public information meeting to obtain community input for the project's 201G application will be held at the Lahaina Intermediate School cafeteria on November 15, 2000 at 7:00 p.m. We note that Ka Hale A Ke Ola has also been meeting with government officials, representatives of community organizations, and individuals active in community affairs to discuss the West Side Resource Center Project.

2. A Traffic Impact Analysis was recently completed for the project. A copy of the report will be included in the Final EA. The Final EA will also be incorporated as part of the 201G application which will be filed with the County Council. We note that copies of the report have been provided to the Maui District Office of the State Department of Transportation's Highways Division and the Maui County Departments of Planning and Public Works and Waste Management for review and comment.

3. The "constrained" population growth projection of 21,149 for the year 2010 will be reflected in the Final EA.

4. The appropriate location of the Napili Fire Station will be noted in the Final EA.

5. The project's long-term affordable rental housing units are intended for use by graduates of the project's transitional housing program, as well as for use by qualified families and individuals from within the community that meet the

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

County's eligibility requirements for affordable rental housing (50 percent or less than the current Maui Island median family income).

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola

kahale\wmaui\c\buchanan.ltr

MUNEKIYO, ARAKAWA & HIRAGA, INC.

October 30, 2000

Jim Peck
419 Alio Street
Lahaina, Hawaii 96761

SUBJECT: West Side Resource Center

Dear Mr. Peck:

Thank you for your October 23, 2000 fax memorandum providing comments on the subject's Draft Environmental Assessment (EA). On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

1. The Preliminary Engineering/Drainage Report that was recently completed for the project examines existing drainage conditions and proposes drainage system improvements for the project. Copies of the report have been provided to the Maui County Departments of Water, Planning, and Public Works and Waste Management for review and comment. A copy of the report will be included in the Final EA. The Final EA will also be included as a part of the 201G application.

2. The vast majority of the project site encompasses lands occupied by former single-family residential use (Wainee Village). A small strip along the south end of the site consists of lands that were formerly utilized for sugar cane cultivation. Due to this former agricultural use, a Phase I Environmental Assessment (to identify potential sources of possible contamination from former agricultural operations) will be undertaken prior to the start construction activities. Should contaminants be present, appropriate remedial measures will be implemented.

3. It is noted that community involvement is important in the project development process. Accordingly, Ka Hale A Ke Ola has been meeting with government officials, representatives of community organizations, and individuals active in community affairs to discuss the development of the West Side Resource Center. In addition, a public information meeting will be held at the Lahaina Intermediate School cafeteria on November 15, 2000 at 7:00 p.m. to obtain community input for the project's 201G application.

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
kahalewamutrc\peckltr.001

MUNEKIYO, ARAKAWA & HIRAGA, INC.

November 17, 2000

Robert O. Siarot, District Engineer
Department of Transportation
650 Palapala Drive
Kahului, Hawaii 96732

SUBJECT: West Side Resource Center

Dear Mr. Siarot:

Thank you for your October 14, 2000 letter providing comments on the project's Traffic Impact Analysis Report (TIAR). On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

The TIAR reveals that existing year 2000 traffic volumes were conservatively growth-factored to estimate future year 2002 traffic conditions without the project, including traffic from other projects in the area, such as the Lahaina Recreation Center park expansion (the year 2002 was used as the traffic horizon for the TIAR since the project is expected to be completed by then). Next, traffic generated by the project was added to the future year 2002 background traffic volumes and the results were then analyzed. The results of the traffic forecast and analysis indicate that the traffic generated by the project will have a minimal effect on the Shaw Street and Honoapiilani Highway intersection and that the intersection is expected to operate well during projected peak hour conditions, with or without the project.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
Wayne Yoshioka, Parsons Brinckerhoff
kahale\wmautrc\dottr.001

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MUNEKIYO, ARAKAWA & HIRAGA, INC.

November 20, 2000

David Craddick, Director
Department of Water Supply
County of Maui
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: West Side Resource Center

Dear Mr. Craddick:

Thank you for your October 19, 2000 and October 23, 2000 letters providing comments on the subject's Draft Environmental Assessment and Preliminary Engineering Report, respectively. On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

The design of the project's water system master plan, which provides for a looped system and separate water meters for each building, has been coordinated with and acknowledged by the department's engineering division.

In addition, appropriate conservation measures and Best Management Practices (BMPs) will be utilized to conserve water and minimize impacts to water resources.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
Warren Unemori, Warren S. Unemori Engineering, Inc.
kahale\wmau\rc\dwsltr.001

environment

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

MUNEKIYO, ARAKAWA & HIRAGA, INC.

December 14, 2000

Esther Ueda, Executive Director
Land Use Commission
Department of Business, Economic
Development & Tourism
State of Hawaii
P.O. Box 2359
Honolulu, Hawaii 96804

SUBJECT: West Side Resource Center
TMK 4-6-15:por. 01

Dear Ms. Ueda:

Thank you for your October 9, 2000 letter providing comments on the subject's Draft Environmental Assessment (EA). On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

For clarification purposes, the proposed exemption from district boundary amendment requirements will be deleted and replaced with the following:

> "An exemption from the standards and permissible uses for agricultural lands set forth in Sections 205-2 and 205-2.5, Hawaii Revised Statutes, shall be granted to allow the project to be developed on agricultural lands without requiring a special permit or district boundary amendment."

Thank you again for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
kahale\wmeuirc\luuctr.001

environment

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: muhinc@aloha.net

MUNEKIYO, ARAKAWA & HIRAGA, INC.

December 14, 2000

John Min, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

SUBJECT: West Side Resource Center

Dear Mr. Min:

Thank you for your November 21, 2000 letter providing comments on the department's review of the subject's Preliminary Engineering and Drainage Reports as well as its Traffic Impact Analysis Report. On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

The department's comments associated with its review of the subject's Preliminary Drainage Report were provided to the project's civil engineer for evaluation. We hope that the attached letter from the project's civil engineer satisfactory responds to the department's questions concerning drainage.

Thank you again for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
Attachment
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
Warren Unemori, Warren S. Unemori Engineering, Inc.
kahale\wmauirc\mlnltr.001

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

WARREN S. UNEMORI ENGINEERING, INC. Civil & Structural Engineers • Land Surveyors
Wells Street Professional Center • 2145 Wells Street, Suite 403 • Wailuku, Maui, HI 96793 TEL: (808) 242-4403 FAX: (808) 244-4856

DEC 0 1 2000

November 28, 2000

Mr. Glenn Tadaki
Munekiyo Arakawa & Hiraga Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Glenn,

Re: West Side Resource Center

The following is our response to questions raised by the Planning Director concerning drainage.

1. What is and how will the increase in runoff from the access road be handled?

   Response: Referring to Figure 5 in the PER, please note that we plan to install catch basins at the west end of the access road near Mill Street to receive the road runoff and direct it into a 6 foot diameter perforated subsurface system which will be installed along the north shoulder of the access road as shown.

2. The soil groups located on the property are clay which is characterized as having slow runoff. What effect would this have with an onsite subsurface retention basin on maintenance?

   Response: Article 15-04-06 Design Standards, (a) General Conditions, Subsection (10) (B) states that "Soil percolation shall not be used in satisfying required storage volume." Therefore the storage volume to be provided is based on no soil percolation allowance.

   To prevent clay soil material from migrating into the voids in the filter rock bedding, the pipe and trench will both be wrapped with filter fabric. Access manholes with built-in rungs are also being provided to permit entry for maintenance purposes.

   Therefore the fact that these facilities are being installed in clay material is not expected to have any adverse effect on storage or maintenance of these facilities.

Wherever feasible, landscaped or grassed areas within the project site will also be contoured and graded to serve as retention basins to induce percolation into the ground.

We hope the foregoing explains how we intend to handle runoff generated by the project. Should you have further questions concerning drainage or other matters, please call.

Mahalo,

Warren S. Unemori

cc: Charles Riding

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MUNEKIYO, ARAKAWA & HIRAGA, INC.

December 14, 2000

Daivd Goode, Director
Department of Public Works
and Waste Management
County of Maui
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: West Side Resource Center

Dear Mr. Goode:

Thank you for your November 27, 2000 letter providing comments on the subject's Draft Environmental Assessment (EA). On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

1. To the extent that it is economically and operationally feasible, consideration will be extended for the possible utilization of the facility to double as an emergency shelter for victims of natural disasters such as floods, earthquakes, and tsunamis.

2. The advisory comments reflected by Item Nos. 2, 3, 4, 5, 6, 7, and 8 of the department's letter are acknowledged.

3. An exemption from Chapter 19.36 of the Maui County Code pertaining to Off-Street Parking and Loading is being requested.

4. Section 201G-118, HRS, provides for the development of housing projects which shall be exempt from all statutes, ordinances, charter provisions, and rules of any governmental agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of units thereon; provided that the project meets minimum standards of health and safety. The requested exemptions for the proposed project comport with Section 201G-118, HRS as they are intended to facilitate the development of the West Side Resource Center and do not contravene minimum public health and safety standards. Construction documents will be submitted to the department for appropriate review and permitting approval.

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@alohu.net

Thank you again for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
kahale\wmaurc\dpwmtr.001

MUNEKIYO, ARAKAWA & HIRAGA, INC.

December 19, 2000

Jonh Min, Director
Department of Planning
County of Maui
250 South High Street
Wailuku, Hawaii 96793

SUBJECT: West Side Resource Center

Dear Mr. Min:

Thank you for your October 24, 2000 letter providing comments on the subject's Draft Environmental Assessment (EA). On behalf of the Department of Housing and Human Concerns and Ka Hale A Ke Ola, we would like to note the following.

1. Archaeological Resources

An Archaeological Inventory Survey of the subject property has been prepared and was submitted to the State Historic Preservation Division (SHPD) on November 21, 2000 for review and approval. A copy of the inventory survey was provided to the Planning Department for review and comment in connection with the preparation of the project's Final EA. In addition, a copy of the inventory survey will also be included in the project's Final EA which will be a part of its 201G application. It should be noted that the inventory survey indicates that the only archaeological site identified by the survey (Site 5042 consisting of two (2) structural remnants of the former Waine'e Village), has yielded adequate information and is no longer considered to be significant for its information content; therefore, the survey recommends that no further archaeological work is necessary.

As far as Waine'e Village is concerned, we note that the responsibility for the oral history of the former Waine'e Village is being handled by Amfac. The feasibility of retaining or relocating trees within the proposed project site will be examined during the detailed design phase of project development.

305 High Street, Suite 104 • Wailuku, Hawaii 96793 • ph: (808)244-2015 • fax: (808)244-8729 • email: mahinc@aloha.net

2. ***Population and Housing***

Information provided by Ka Hale A Ke Ola indicates that the typical household that will be served by the project will consist of very low income families and individuals. While the maximum length of stay for the project's transitional housing units is two years, the average length of stay is expected to range from 12 to 15 months. In addition, while there is no time limitation for the project's long-term affordable rental housing units, it is expected that the renewal rate for these units will be similar to that of Ka Hale A Ke Ola's long-term rental housing facility in Wailuku (Hale Makana) which experiences a 72 percent renewal rate. The residents of the project are anticipated to be existing families and individuals from the West Maui community. As such, the redistribution of these families and individuals within the region is not expected to adversely impact public services or facilities. Since Federal funds will be utilized for the project, housing opportunities will be open to all families and individuals that meet Ka Hale A Ke Ola's eligibility requirements for long-term affordable rental housing (which includes but is not limited to 50 percent or less than the current Maui island median family income).

3. ***Schools and Recreational Facilities***

Based on information furnished by Ka Hale A Ke Ola, 75 percent of adults are life long Maui residents. The average length of residency on the island for Ka Hale A Ke Ola's Wailuku Resource Center adult residents is about 18 years. Of the Center's current resident population, the average ages of its male, female, and child residents are 32 years, 26 years, and 6 years, respectively. It is expected that children residing at the West Side Resource Center will be existing students that already attend public schools in the West Maui school district. Information provided by the State Department of Education indicates that current student enrollments at these schools are as follows: King Kamehameha III Elementary School (620), Princess Nahienaena Elementary School (645), Lahaina Intermediate School (626), and Lahainaluna High School (924). Children from the West Side Resource Center that will be attending these schools are not expected to adversely impact existing public educational services or facilities. Given the project's distance from public schools in the area, the closest school is King Kamehameha III Elementary School, which is about 2.5 (roadway) miles distant, while the remainder of the public schools are approximately 8.5 (roadway) miles away, it is anticipated that nearly all of the project's children will be transported to school by public school buses.

Onsite recreational features include a children's playground that will be located at the project's child day care center. In addition, public recreational facilities in the vicinity include the Lahaina Recreation Center, the Lahaina Aquatic Center, and the West Maui Youth Center. The project's access road will be privately controlled and although no traffic improvements (i.e., cross-walks) are currently contemplated for providing access to the public recreational facilities that are located makai of the project site, coordination with the County Department of Public Works and Waste Management will be undertaken should any improvements be required.

4. ***Land Use and Community Character***

The proposed parking exemption was established in connection with an assessment of actual parking stall use at the Wailuku Resource Center. Based on this evaluation, as well as an examination of anticipated parking needs for the West Side Resource Center, and the use of the 15-passenger van that will be utilized for shuttle and support services, the 160 parking stalls that are proposed for the project are expected to adequately accommodate the project's parking needs. In this light, no parking-related impacts are anticipated nor are any mitigative measures required.

To provide for the efficient use of the subject property, the project's site planning process analyzed space needs, area requirements, programs and functions, spaces and adjacencies, and space relationships and layouts in order to formulate a viable site plan. The limited amount of space notwithstanding, maximum feasible building setbacks are planned within the portions of the site that border the lands designated for Single-Family Residential use by the West Maui Community Plan. One of the two buildings along the western part of the site will be setback 90 feet from the property line, while the other building will be setback 75 feet. In addition, of the three buildings along the northern portion of the site, two of the buildings will be setback 35 feet, while the remaining building will be setback 25 feet. It should also be noted that landscape plantings are planned along the perimeter of the project site. When fully established, the plantings will provide the project with a noise and visual buffer from surrounding land uses.

5. ***Medical Facilities***

As with Ka Hale A Ke Ola's Wailuku Resource Center and Hale Makana facilities, the majority of the project's residents are anticipated to be covered by Quest, a health insurance program developed by the State Department of Health (DOH)

which is designed to provide medical coverage for Hawaii's low income residents. Ka Hale A Ke Ola will work with the DOH and medical service providers such as HMSA, Kaiser-Permanente, and the Community Clinic of Maui to obtain Quest coverage for the project's uninsured residents.

One of the services to be provided by the West Side Resource Center will be to provide its residents with referrals to health care agencies or providers in Central or West Maui that can best serve their individual needs. Individuals who are assessed by Ka Hale A Ke Ola to be unable to conduct themselves within Ka Hale A Ke Ola's program parameters will be referred to other agencies for assistance as necessary. Mental health services for the island of Maui are provided by DOH facilities in Wailuku. Emergency mental health services are provided by Kokua Services which is also located in Wailuku.

6. ***Air Quality***

As previously indicated, landscape plantings are planned along the perimeter of the project site. Landscape plantings for the project's site and buildings will be examined in detail during the West Side Resource Center's comprehensive design phase. Project landscaping will be designed to keep dust, heat, and project-related emissions to a minimum. In addition, shade trees will be provided in parking areas as required by Chapter 19.36 of the Maui County Code.

7. ***Noise***

Fencing and landscaping for the West Side Resource Center will be included in the project's comprehensive design phase. Fencing and landscape plantings are planned along the perimeter of the project site. It should also be noted that house rules governing noise will be strictly enforced by the project's onsite security staff. With regard to the buildings that adjoin the area designated for Single-Family Residential use, it should be noted that one of the two buildings along the western part of the project site will be setback 90 feet from the property line, while the other building will be setback 75 feet. In addition, of the three buildings along the northern portion of the site, two of the buildings will be setback 35 feet, while the remaining building will be setback 25 feet.

8. ***Roadways and Traffic***

A Traffic Impact Analysis Report (TIAR) has been prepared for the project and will be included in the project's Final EA which will be a part of its 201G application.

Copies of the TIAR were provided to the State Department of Transportation and the County Department's of Planning and Public Works and Waste Management for review and comment in connection with the preparation of the subject's Final EA.

All-weather access to the West Side Resource Center will be provided by 24-foot wide paved road which will be constructed from Mill Street to the project site. It should be noted that the TIAR does not recommend any traffic improvements at the Mill Street and Shaw Street intersection nor does it recommend a right-turn lane from Honoapiilani Highway onto Shaw Street. However, the TIAR does recommend a STOP-sign control on all approaches to the cross intersection formed by Shaw Street and the driveway to the Lahaina Recreation Center on the south and the driveway to the overflow parking area for the Lahaina Aquatic Center to the north. As indicated by the TIAR, the Honoapiilani Highway/Shaw Street intersection currently operates at level of service (LOS) C. Overall traffic operations at this intersection (including right- and left-turns) for future year 2002 are also projected to operate at LOS C, with or without the project.

Sidewalks, which will be constructed in accordance with Americans with Disabilities Act (ADA) standards, will be provided along the project's privately-controlled access road. While not officially designated as a bikeway, bicycle traffic can be accommodated by the access road.

It is estimated that the West Side Resource Center will be initially staffed by 12 employees. A total of 78 stalls will be provided for employee and resident parking for the project's first phase, while an additional 82 stalls will be provided for subsequent phases.

9. ***Water and Wastewater Systems***

The water and wastewater systems proposed for the West Side Resource Center are discussed in the Preliminary Engineering Report that has been prepared for the project and will be included in the project's Final EA which will be a part of its 201G application. Copies of the PER were provided to the County Department's of Water, Planning, and Public Works and Waste Management for review and comment in connection with the preparation of the subject's Final EA.

Generally, the proposed water system for the project involves extending a new waterline from the end of the existing County system (at the intersection of Mill and Shaw Streets) and then looping the waterline within the project site. The

proposed sewer system for the project will involve a tie-in to the existing system that currently terminates at the Lahaina Aquatic Center on the mauka side of Honoapiilani Highway. A gravity line will then be extended from this connection to the project site.

10. Drainage

Site specific and related offsite drainage improvements are discussed in the PER (which includes a Preliminary Drainage Report) that has been prepared for the project. Onsite runoff will be intercepted by catch basins and then conveyed by an underground drainage system into a subsurface detention facility located in the project's lower parking lot. The subsurface system, which will consist of large diameter perforated pipes, will be designed to accommodate the incremental increase in onsite runoff and will also provide a small diameter pipe to release the pre-development runoff into the direction of an existing depression in the area.

Offsite runoff will first be directed to an existing irrigation reservoir about 200 feet mauka of the project site. When the reservoir reaches its maximum capacity, a spillway at its southwestern corner will direct the overflow toward the newly constructed flood water diversion channel recently constructed by the Natural Resources Conservation Service. An earthen berm or rock wall will also be constructed along the project site's mauka boundary to prevent offsite runoff from entering the site. Runoff from the project access road will be directed into a subsurface retention system in the shoulder of the road in the area above Mill Street.

11. Proposed Exemptions

With regard to the exemptions requested for the West Side Resource Center, we would like to note that Section 201G-118, HRS, provides for the development of housing projects which shall be exempt from all statutes, ordinances, charter provisions, and rules of any governmental agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land, and the construction of units thereon; provided that the project meets minimum standards of health and safety. The requested exemptions for the project are consistent with the provisions of Section 201G-118, HRS as they are intended to facilitate the development of the project without compromising minimum standards of public health and safety.

Thank you for providing us with your comments.

Very truly yours,

Glenn Tadaki, Planner

GT:cc
cc: Alice Lee, Department of Housing and Human Concerns
Charles Ridings, Ka Hale A Ke Ola
Warren Unemori, Warren S. Unemori Engineering, Inc.
Richard Miyabara, GYA Architects, Inc.
Wayne Yoshioka, Parsons Brinckerhoff
Erik Fredricksen, Xamanek Researches

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Chapter XII

Public Information Meeting Summary

PUBLIC INFORMATION MEETING SUMMARY

A public information meeting for the proposed West Side Resource Center Project was held on November 15, 2000 at 7:00 p.m. in the Lahaina Intermediate School Cafeteria. The purpose of the meeting was to provide the general public with an overview of the project and to answer any questions concerning the development and operation of the project.

Notices of the meeting were published in the November 2nd and 9th issues of the Lahaina News and the November 3rd and 10th editions of the Maui News.
The meeting was attended by 20 members of the general public. Refer to the attached attendance sheet. A summary of responses and clarifications to questions raised by meeting participants follow below.

1. General Information

It was noted that the West Side Resource Center programs, rules and operating procedures will be the same programs, rules and operating procedures that are in place at the Ka Hale A Ke Ola Homeless Resource Center in Wailuku. The programs, rules and operating procedures have been developed by Ka Hale A Ke Ola over the past 14 years since Ka Hale A Ke Ola started in Puunene in 1986.

2. Programs

There will be two programs that will be implemented at the West Side Resource Center. The programs are:

a. The Homeless Program which consists of the Emergency Program (limited to six weeks) and the Transitional Program (limited to two years); and

b. The Affordable Rental Program which provides affordable rentals to individuals and families earning 50% or less of the median family income for Maui.

3. Program Admission

a. Homeless Program

A person or family seeking admission meets with an Intake Case Manager prior to admission to ensure that the person or family is either unsheltered or at-risk (i.e, will be evicted from current housing within 45 days). Individuals and families admitted to the West Side Resource Center program must comply with three primary rules: no drugs, no alcohol and no violence. A violation of one of these rules will result in the termination

of services to the person or family. Pre-admission screening includes a review of the State of Hawaii's sex offender list. A person on the sex offender list will not be admitted to the program.

Once admitted, the individual or family is assigned a Case Manager. The individual or family must meet with the Case Manager on a periodic basis (Emergency Program: Minimum of weekly meetings. Transitional Program: Minimum of two meetings per month.) The resident and the Case Manager develop an Action Plan that establishes milestone goals for the resident for the next 30, 60 and 90 days. The Case Manager reviews the resident's progress toward meeting the goals. Life skills classes are mandatory. If a person is a recovering substance abuser, then the substance abuse program classes are also mandatory. Failure to comply with the Action Plan may result in the termination of services to the person or family.

b. ***Affordable Rental Program***

The Affordable Rental Program has four primary criteria for selecting applicants to be tenants. The four primary criteria are related to program eligibility and are designed to reasonably and consistently determine applicants' ability to perform the obligations of lease. The four primary criteria are:

1. Must earn 50% or less of the median family income for Maui; and
2. Must provide an acceptable written landlord reference; and
3. Must have an acceptable credit report; and
4. Must have an acceptable criminal record report.

4. ***Project Security***

One of the attendees indicated that the project could attract undesirable elements of the homeless population to the area, especially when considering that the homeless go to the Salvation Army for meals. It was noted, however, that the project access road will be privately controlled and that onsite security will be provided on a 24-hour, 7-day a week basis. In addition to providing for the safety and well-being of the project's residents, Ka Hale A Ke Ola's security staff will remove any unauthorized individuals from the premises. .

5. ***Project Funding***

Construction funding for the project will be provided by government sources, including but not limited to, U.S. Department of Housing and Urban Development, State of Hawaii Rental Housing Trust Fund, U.S. Department of Agriculture, and the County of Maui. Operating funding will initially be provided primarily by the

County of Maui (60%-75%) and potentially the U.S. Department of Housing and Urban Development (25%-40%). Current plans indicate a reduced dependence on the County of Maui after approximately three years.

6. ***Archaeological Impacts***

One of the attendees indicated that in addition to Kauaula Valley, that the banks along Kauaula Stream contain sites that are of archaeological and cultural significance. It was further indicated that a 300-ft. wide buffer strip along both sides of Kauaula Stream has been established to protect the sites along the stream. As the project site is located approximately 3,000 ft. to the north of Kauaula Stream, no impacts to the archaeological sites along the stream are expected.

A summary of the archaeological inventory survey indicates in part that *"... Subsurface testing on the parcel did not yield any evidence of significant material cultural remains.... No further archaeological work is recommended for this 5-acre parcel...."* The complete inventory survey will be submitted to the State Historic Preservation Division for review and approval and will also be included in the project's 201G applications.

7. ***Project Relationship to Wainee Village***

Pioneer Mill made a unilateral decision to close the remaining occupied sections of Wainee Village by the end of 1999. The remaining occupied sections that were closed by Pioneer Mill during late 1999 were on the Lahainaluna Road end of Wainee Village. During the meeting it was confirmed that no one occupied the project site during 1999.

References

References

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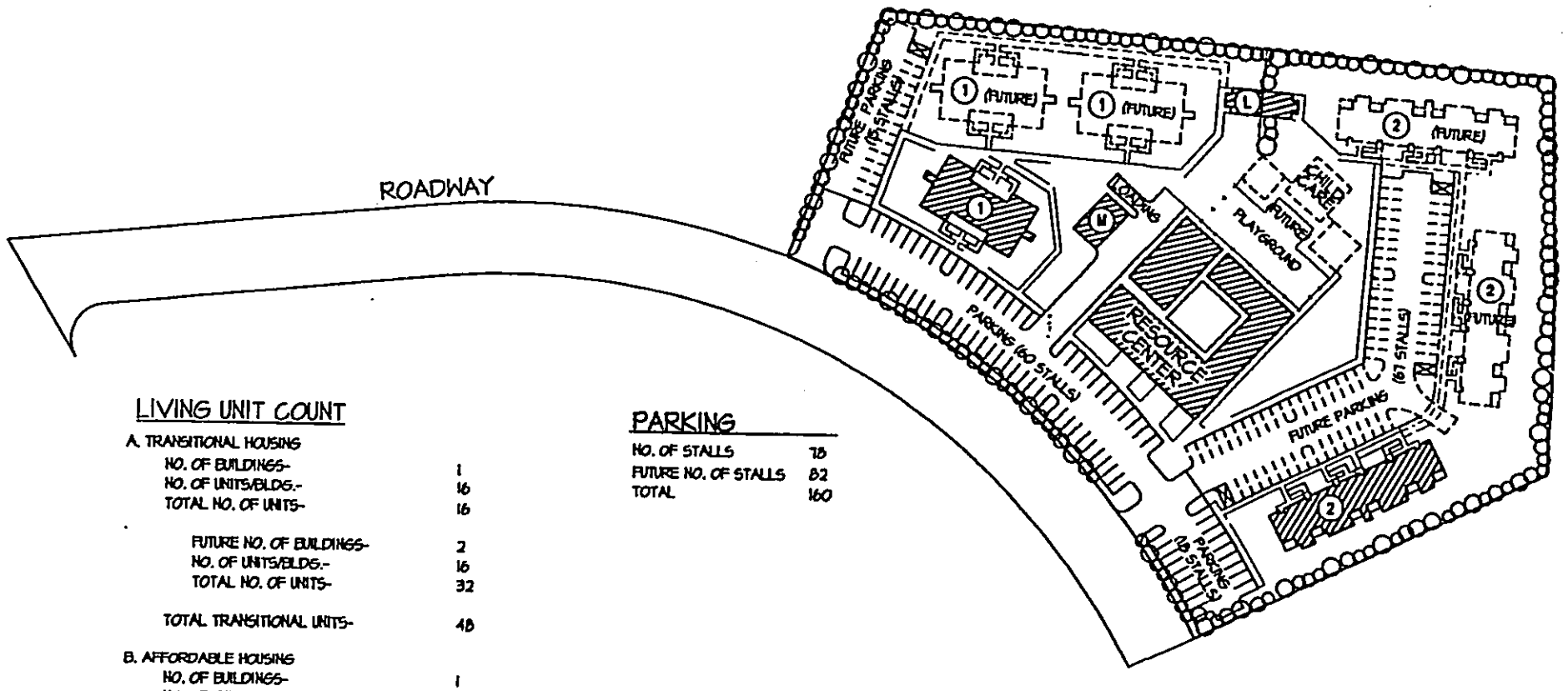
Appendices

Appendix A

Preliminary Development Plans



LIVING UNIT COUNT

A. TRANSITIONAL HOUSING	
NO. OF BUILDINGS-	1
NO. OF UNITS/BLDG.-	16
TOTAL NO. OF UNITS-	16
FUTURE NO. OF BUILDINGS-	2
NO. OF UNITS/BLDG.-	16
TOTAL NO. OF UNITS-	32
TOTAL TRANSITIONAL UNITS-	48
B. AFFORDABLE HOUSING	
NO. OF BUILDINGS-	1
NO. OF UNITS/BLDG.-	10
TOTAL NO. OF UNITS-	10
FUTURE NO. OF BUILDINGS-	2
NO. OF UNITS/BLDG.-	10
TOTAL NO. OF UNITS-	20
TOTAL AFFORDABLE HOUSING UNITS-	30

PARKING

NO. OF STALLS	78
FUTURE NO. OF STALLS	82
TOTAL	160

SITE PLAN

SCALE: 1" = 40'-0"

LEGEND

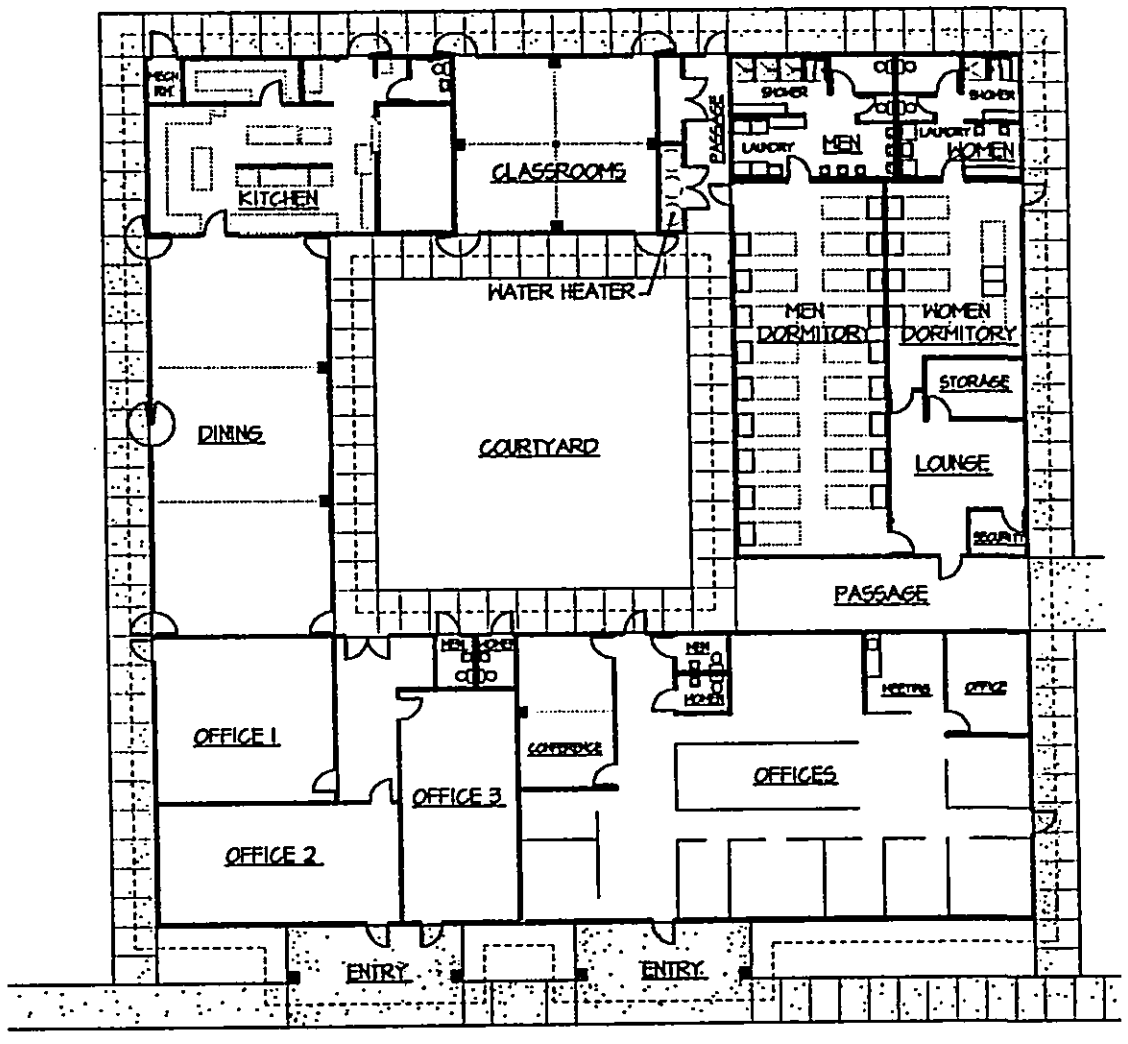
- (1) TRANSITIONAL HOUSING
- (2) AFFORDABLE HOUSING
- (L) LAUNDRY BUILDING
- (M) MAINTENANCE BUILDING
- TRASH ENCLOSURE
- FIRST PHASE

N

GYA ARCHITECTS, INC.
A DESIGN CORPORATION

WEST SIDE RESOURCE CENTER

LAHAINA, MAUI, HAWAII
DATE: 10/3/00



FLOOR PLAN

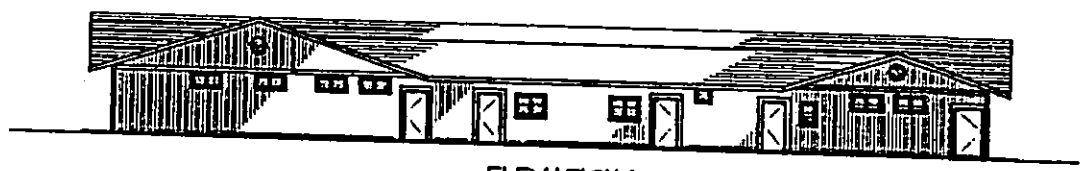
RESOURCE CENTER BUILDING

GYA ARCHITECTS, INC.
A DESIGN CORPORATION

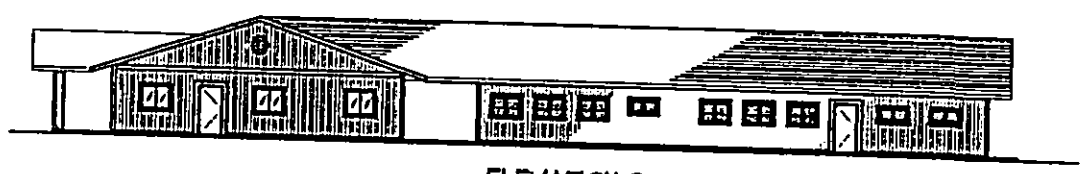
WEST SIDE RESOURCE CENTER

LAHAINA, MAUI, HAWAII
DATE: 8/24/00

2

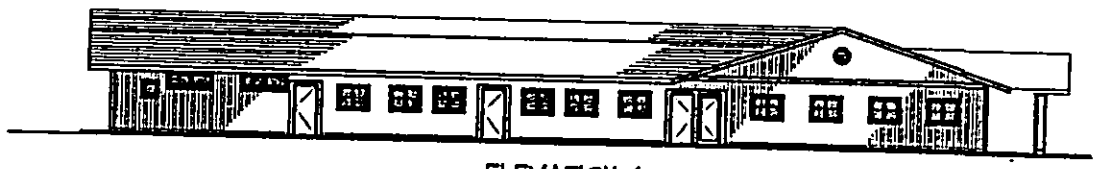


ELEVATION 1



ELEVATION 2

ELEVATION 3



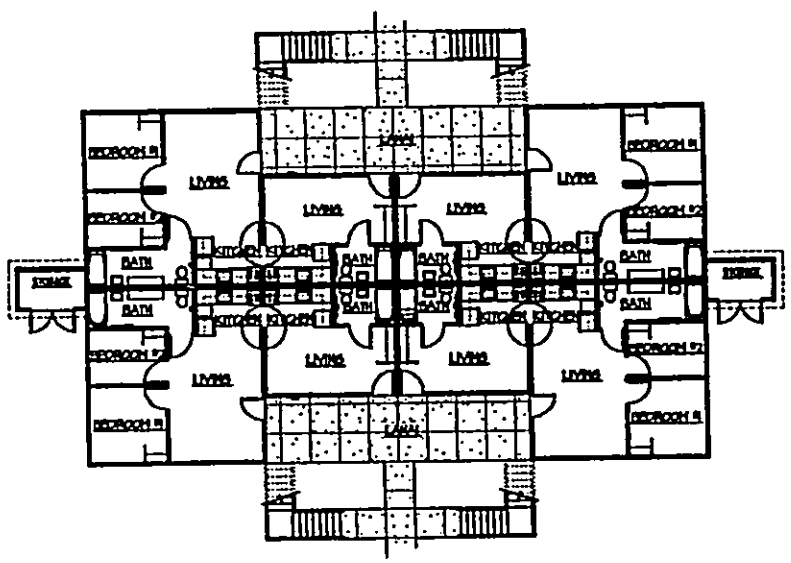
ELEVATION 4

RESOURCE CENTER BUILDING

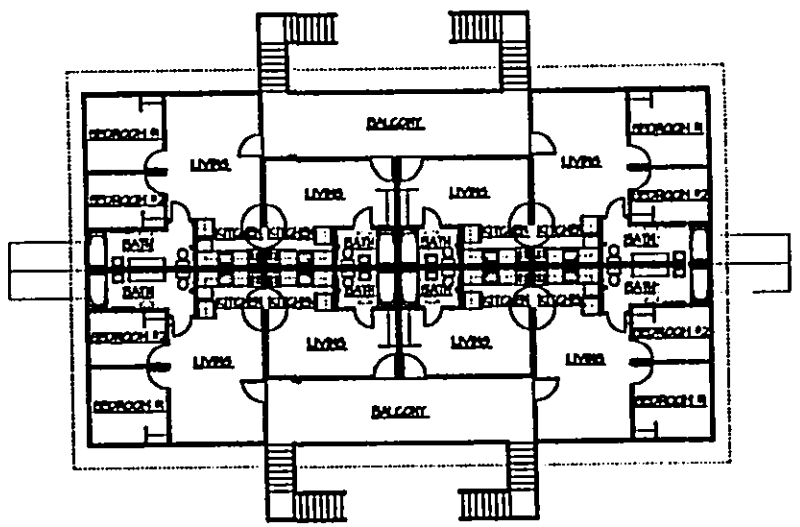
GYA ARCHITECTS, INC.
A DESIGN CORPORATION

WEST SIDE RESOURCE CENTER

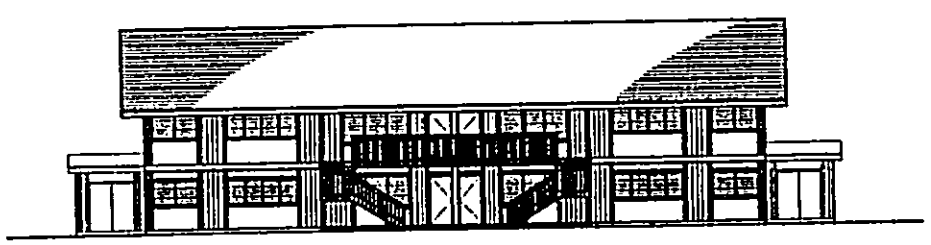
LAHAINA, MAUI, HAWAII
DATE: 8/22/00



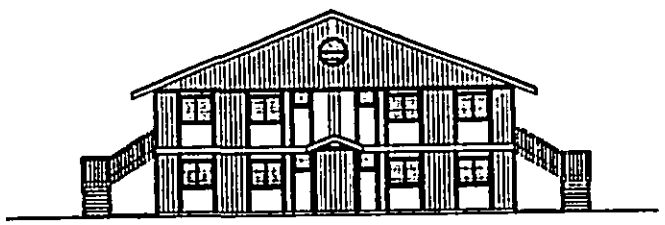
FIRST FLOOR PLAN



SECOND FLOOR PLAN



ELEVATION 1 (ELEVATION 3 SIM.)



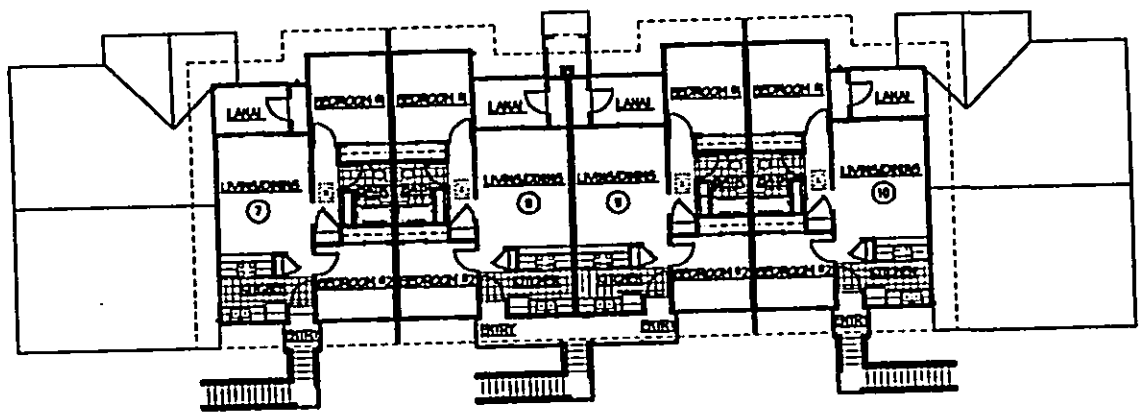
ELEVATION 2 (ELEVATION 4 SIM.)

TRANSITIONAL HOUSING :

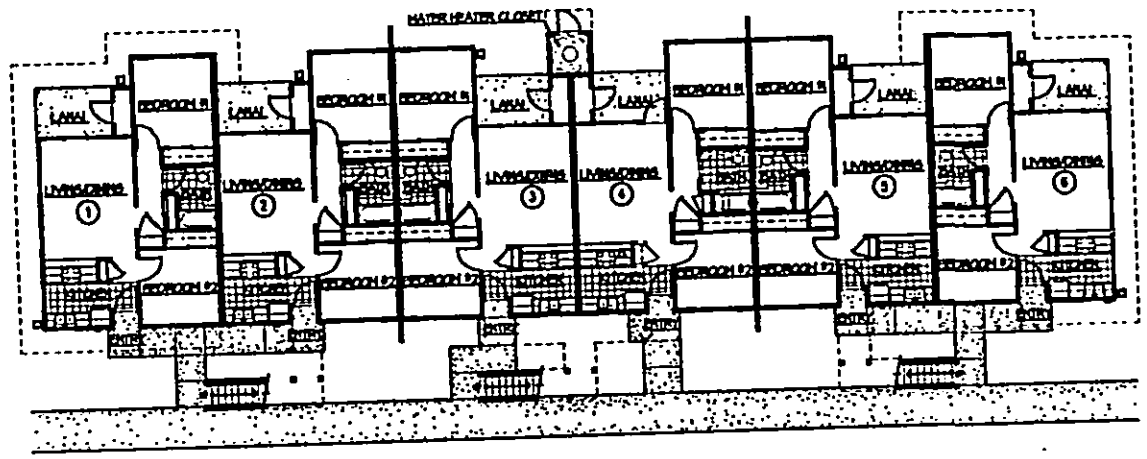
GYA ARCHITECTS, INC.
A DESIGN CORPORATION

WEST SIDE RESOURCE CENTER

LAHAINA, MAUI, HAWAII
DATE: 8/22/00



SECOND FLOOR PLAN



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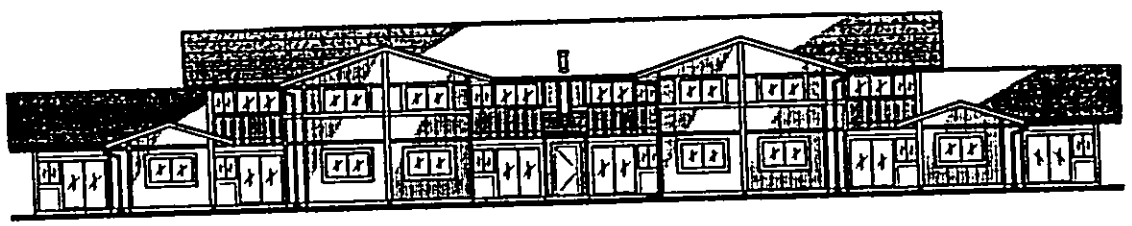
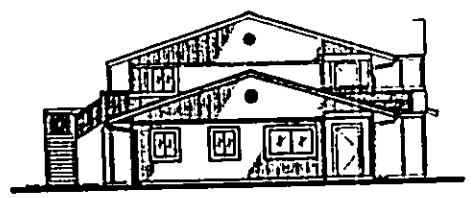


ELEVATION 1



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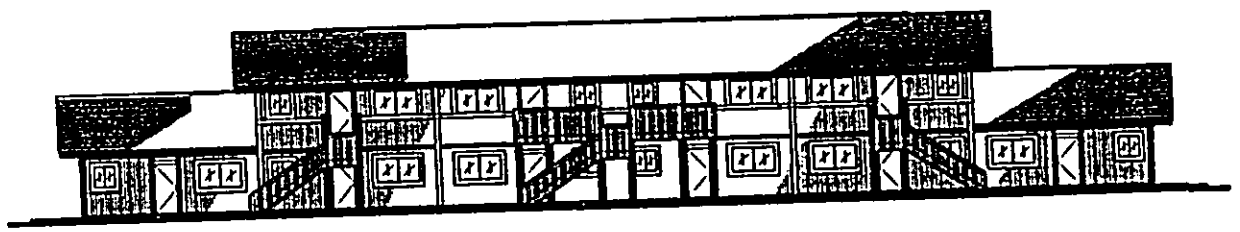

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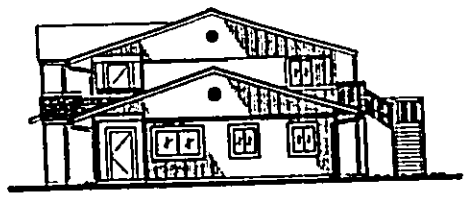


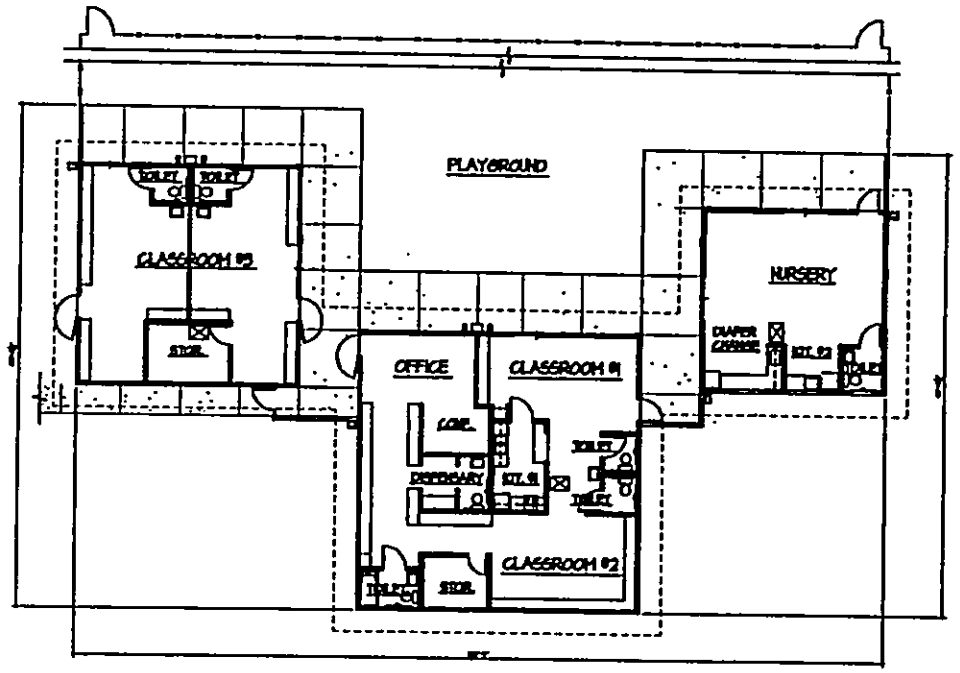
ELEVATION 4

AFFORDABLE HOUSING

GYA ARCHITECTS, INC.
A DESIGN CORPORATION

WEST SIDE RESOURCE CENTER

LAHAINA, MAUI, HAWAII
DATE: 8/22/00



FLOOR PLAN

ELEVATION 1

ELEVATION 2

ELEVATION 3

ELEVATION 4

CHILD CARE BUILDING

GYA ARCHITECTS, INC.
A DESIGN CORPORATION

WEST SIDE RESOURCE CENTER

LAHAINA, MAUI, HAWAII
DATE: 10/5/00

Appendix B

Proposed Section 201G-118 Exemptions

WEST SIDE RESOURCE CENTER
PROPOSED SECTION 201G-118 EXEMPTIONS

A. EXEMPTIONS FROM TITLE 2, ADMINISTRATION AND PERSONNEL

1. An exemption from Chapter 2.80A, General Plan and Community Plans, shall be granted to exempt the project from obtaining a Community Plan amendment.

B. EXEMPTIONS FROM TITLE 12, STREETS, SIDEWALKS, AND PUBLIC PLACES

1. An exemption from Chapter 12.08, Driveways, shall be granted to exempt the project from driveway permit and inspection fees.

C. EXEMPTIONS FROM TITLE 16, BUILDINGS AND CONSTRUCTION

1. Exemptions from Chapters 16.18A, Electrical Code, 16.20A, Plumbing Code, and 16.26A, Building Code, shall be granted to exempt the project from electrical, plumbing, and building permit fees, as well as inspection and plan review fees.

2. An exemption from Section 16.08.080, Room Dimensions, shall be granted for the transitional housing units to decrease the superficial floor area requirement for a room used for both living and sleeping purposes from 120 square feet to 100 square feet, and decrease the superficial floor area requirement for every other room used for sleeping purposes from 120 square feet for two (2) persons to 70 square feet for two (2) persons. In addition, an exemption shall be granted to decrease the superficial floor area requirement for the living room of an efficiency living unit from 200 square feet to 155 square feet.

D. EXEMPTIONS FROM TITLE 18, SUBDIVISIONS

1. Exemptions from Section 18.04.030, Administration, and Section 18.16.020, Compliance, shall be granted to exempt the project from obtaining a Change in Zoning and Community Plan amendment.

2. An exemption from Section 18.16.050, Minimum Right-of-Way and Pavement Widths, shall be granted to allow a pavement width of 24 feet for the project's access road.

3. An exemption from Section 18.16.320, Parks and Playgrounds, shall be granted to exempt the project from park dedication and assessment requirements.

4. An exemption from Section 18.20.080, Curbs and Gutters, shall be granted to exempt the project from the construction of gutter improvements.

5. An exemption from Section 18.20.140, Utility Lines and Facilities, shall be granted to permit primary utility lines to be installed overhead.

6. An exemption from Chapter 18.32, Variances and Exceptions, shall be granted. Variances from Title 18 shall be granted in accordance with the procedures established in Attachment 1.

E. EXEMPTIONS FROM TITLE 19, ZONING

1. An exemption from Chapter 19.30A, Agricultural District, shall be granted to allow the project to be developed in accordance with the provisions established for the A-1 apartment district as contained in Chapter 19.12, Apartment District. In order to complement and facilitate the development of the project, the following uses shall also be permitted: (a) a homeless resource center with office, kitchen, dining, bathroom, dormitory, classroom, storage, security, and meeting/conference facilities; (b) a child day care center; (c) laundry, storage, and maintenance buildings; and (d) required parking for the foregoing facilities.

2. An exemption shall be granted from Chapter 19.36, Off-Street Parking and Loading, to allow 1.0 space per 500 square feet of floor area for the resource center building, 1.5 spaces per transitional housing unit, and 2.0 spaces per long-term affordable rental housing unit. When the child day care center is implemented, an exemption shall be granted to allow 1.0 space per 500 square feet of floor area. In addition, an exemption shall be granted to allow 1.0 loading space for the entire project.

3. An exemption from Section 19.04.040, Definitions, shall be granted to allow for a building's height to be the vertical distance measured from a point on the top of a structure to a corresponding point directly below on the finish grade.

4. An exemption from Chapter 19.520, Variances and Appeals, shall be granted. Variances from Title 19 shall be granted in accordance with the procedures established in Attachment 2.

F. EXEMPTIONS FROM TITLE 20, ENVIRONMENTAL PROTECTION

1. An exemption from Section 20.08.090, Permit - Fees, shall be granted to exempt the project from grading, grubbing, and excavation permit fees, as well as inspection fees.

G. *EXEMPTIONS FROM OTHER REGULATORY REQUIREMENTS*

1. The applicant is requesting that the project be granted exemptions from the actions of the Board of Water Supply and the Rules and Regulations of the Department of Water Supply, relating to water meter installation and water system development fees.

2. An exemption from Section III-A-6-c of the Drainage Standards for the County of Maui, dated July 1995, relating to design standards and general conditions, shall be granted to allow soil percolation and 100 percent of the voids within rock envelopes to be used in satisfying required storage volumes.

3. An exemption shall be granted to allow landscape irrigation for the project to connect with, and utilize water from, the County water system.

4. An exemption from Standard Details for Public Works Construction (September 1984, as amended) shall be granted to allow the use of Class C pavement for the project's access road (Shaw Street Extension-from Mill Street to the project site).

5. An exemption from the standards and permissible uses for agricultural lands set forth in Sections 205-2 and 205-4.5, Hawaii Revised Statutes, shall be granted to allow the project to be developed on agricultural lands without requiring a special permit or district boundary amendment.

WEST SIDE RESOURCE CENTER

PROCEDURES FOR AMENDING TITLE 18 STANDARDS

Modifications and variances to Title 18 may be approved by the Director of Public Works and Waste Management in accordance with the following provisions:

I. Procedures

(A) The applicant shall submit in writing, one (1) original and ten (10) copies of the request for modification or variance which shall include justification for the proposed change. As appropriate, the applicant shall submit plan, section, elevation, and other related drawings prepared by an architect, landscape architect or engineer (as applicable) registered in the State of Hawaii, which schematically depicts the proposed modification or variance;

(B) Within ten (10) calendar days of receipt of the applicant's written request, the Director of Public Works and Waste Management shall acknowledge in writing, receipt of the request and notify the applicant that the information provided in the request is complete or that additional information is required; and

(C) Following a determination that the request is complete, the Director of Public Works and Waste Management shall render a decision in writing within 21 calendar days. Such decision shall be reasonable and shall consider the following criteria:

- The proposed request shall not result in adverse impacts to the surrounding neighborhood;
- The proposed request shall not unreasonably burden public infrastructure and facilities which shall include water, wastewater, roadway, drainage, utility, parks, police, fire and educational systems; and
- The proposed request is consistent with the purpose and intent of the original 201G-118 application.

WEST SIDE RESOURCE CENTER

PROCEDURES FOR AMENDING TITLE 19 STANDARDS

Modifications and variances to standards as set forth in Title 19 of the Maui County Code may be approved by the Planning Director in accordance with the following provisions.

i. Procedures

(A) The applicant shall submit in writing, one (1) original and ten (10) copies of the request for proposed modification or variance which shall include justification for the proposed change. As appropriate, the applicant shall submit plan, section, elevation, and other related drawings prepared by an architect, landscape architect or engineer (as applicable) registered in the State of Hawaii, which schematically depicts the proposed modification or variance;

(B) Within ten (10) calendar days of receipt of the applicant's written request, the Planning Director shall acknowledge in writing, receipt of the request and notify the applicant that the information provided in the request is complete or that additional information is required; and

(C) Following a determination that the request is complete, the Planning Director shall render a decision in writing within 21 calendar days. Such decision shall be reasonable and shall consider the following criteria:

- The proposed request shall not result in adverse impacts to the surrounding neighborhood;
- The proposed request shall not unreasonably burden public infrastructure and facilities which shall include water, wastewater, roadway, drainage, utility, parks, police, fire and educational systems; and
- The proposed request is consistent with the purpose and intent of the original 201G-118 application.

Appendix C

Archaeological Inventory Survey

An Archaeological Inventory Survey
Of the West Side Resource Center
(Ka Hale A Ke Ola)
Lands of Ko`oka, Waine`e, Pua`anui,
Lahaina District, Maui Island
(TMK: 4-6-15: por. 1)

Prepared for:

Munekiyo, Arakawa, and Hiraga, Inc.
Wailuku, Hawaii

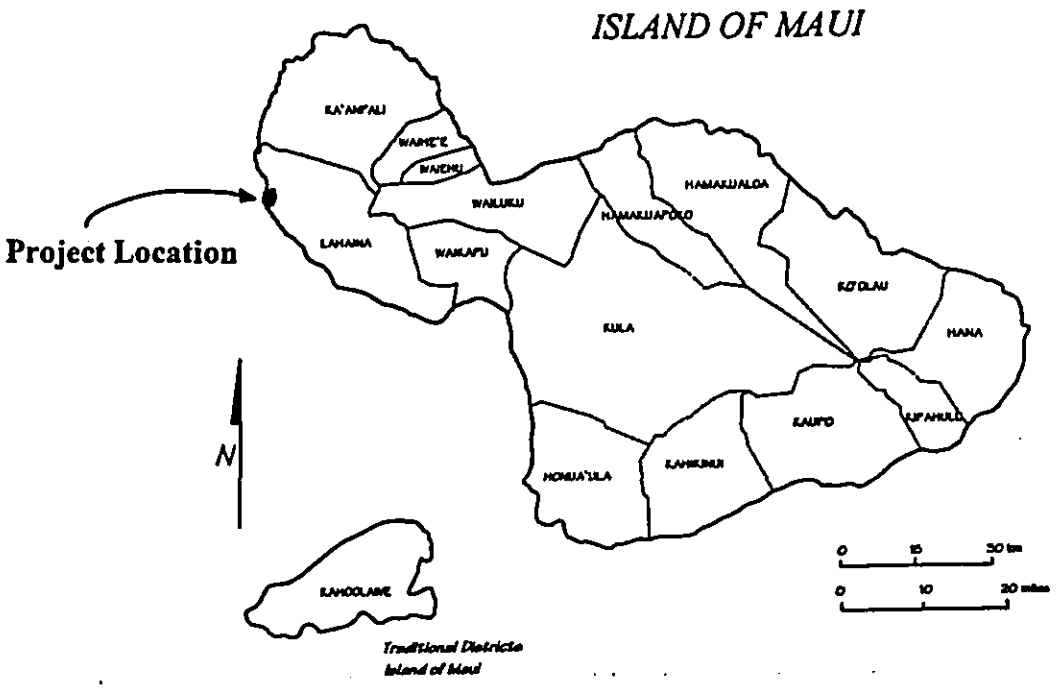
Prepared by:

Xamanek Researches
Pukalani, Hawaii

Demaris L. Fredericksen
Erik M. Fredericksen

DRAFT

November 17, 2000


ISLAND OF MAUI
Project Location
KA'ANAPALI
WAIHE'E
WAIEHU
WAILUKU
LAHAINA
WAILAPU
HAMAKUALOA
HAMAKUAPOKO
KULA
KEOLAU
HANA
KAUPO
KIPAHULU
HONUA'ULA
KAHIKINUI
KAHOOLAWE
N
0 15 30 km
0 10 20 miles
Traditional Districts
Island of Maui

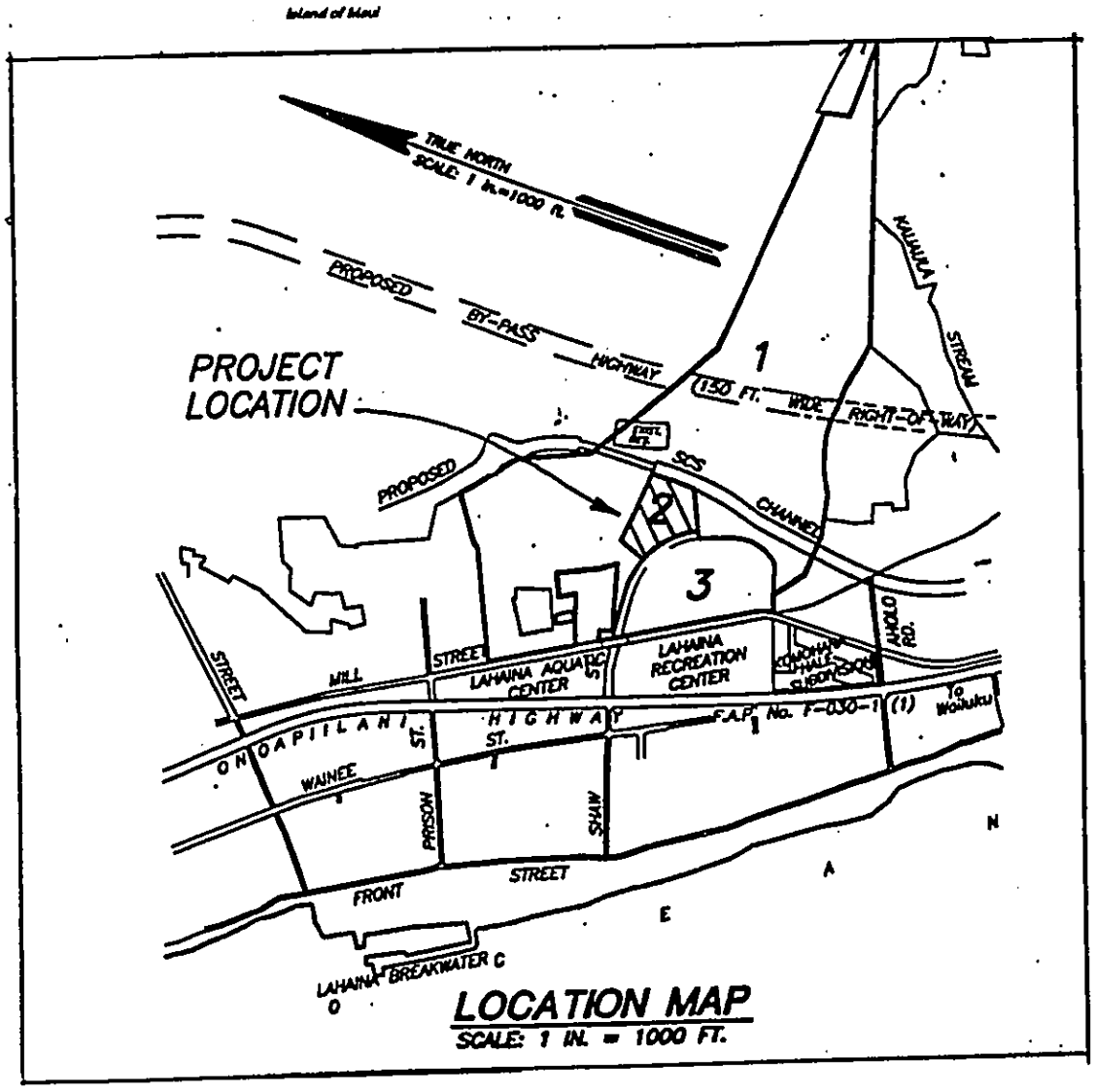
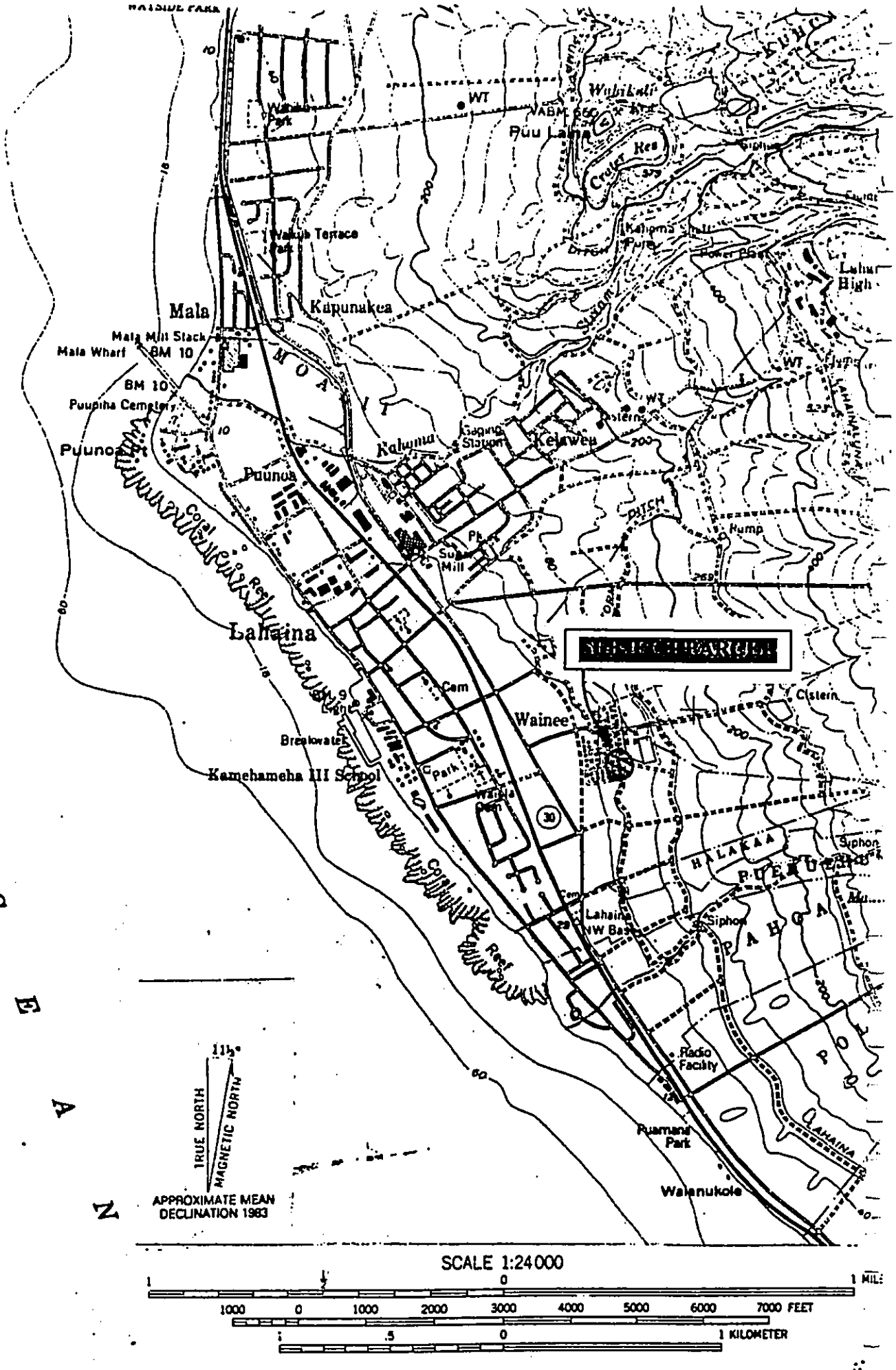
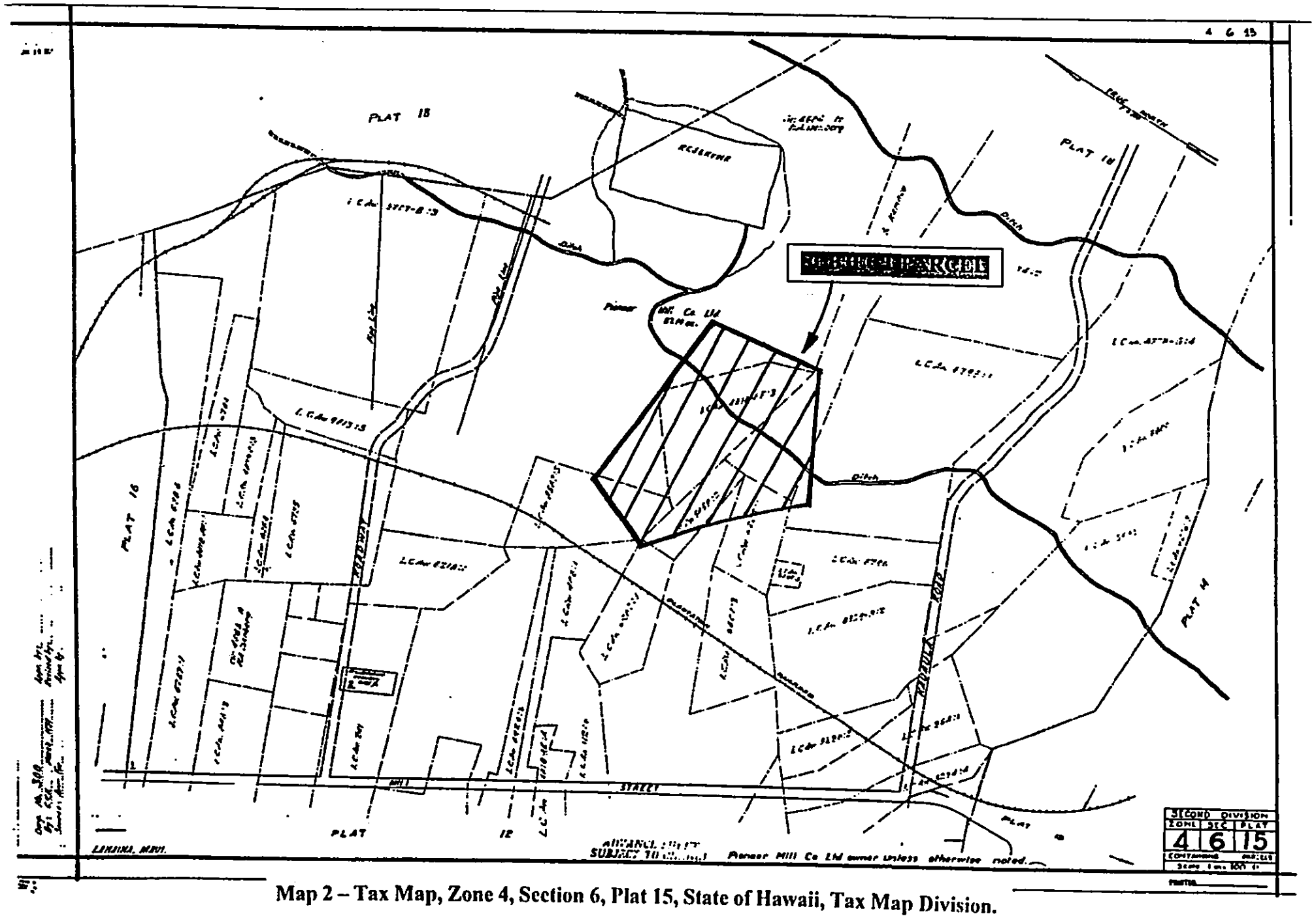

TRUE NORTH
SCALE: 1 in.=1000 ft.
PROPOSED
BY-PASS
HIGHWAY
PROJECT
LOCATION
1
150 FT. WIDE RIGHT-OF-WAY
KAUAULA
STREAM
PROPOSED
SCS
CHANNEL
2
3
MILL
STREET
LAHAINA AQUATIC CENTER
LAHAINA RECREATION CENTER
HONOAPIILANI HIGHWAY
F.A.P. No. F-030-1 (1)
To Wailuku
ONO
WAINEE
PIKSON
SHAW
FRONT
STREET
LAHAINA BREAKWATER
LOCATION MAP
SCALE: 1 IN. = 1000 FT.

TABLE OF CONTENTS

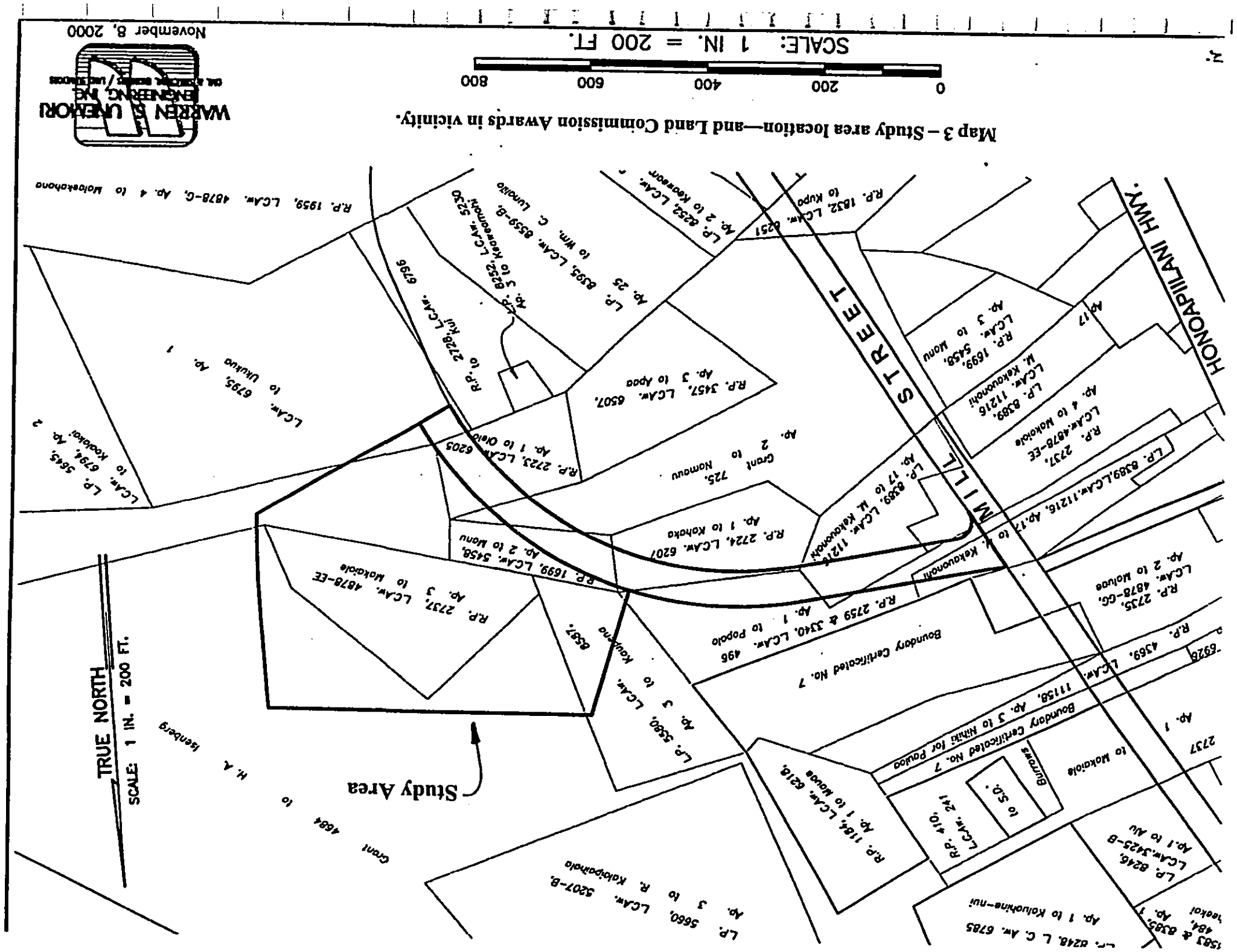


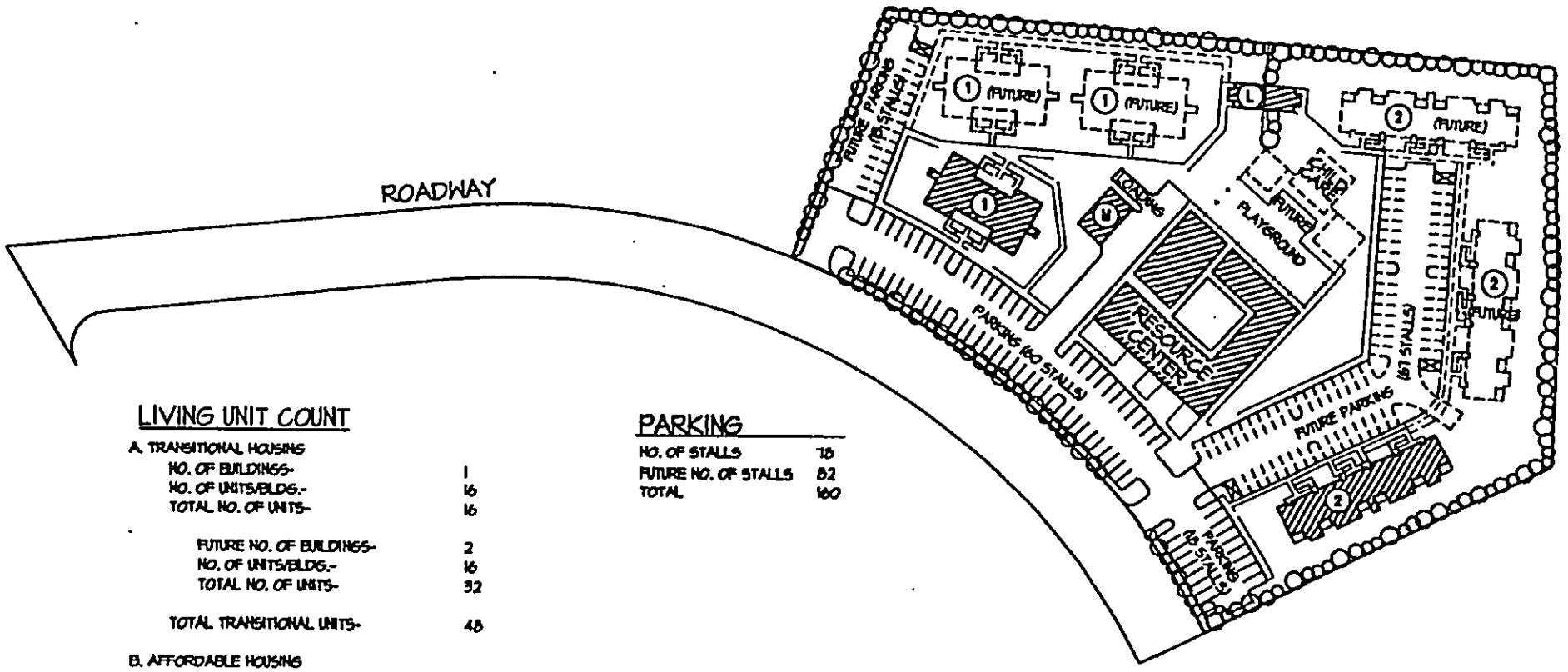
Map 1 – Topographic Map, U.S.G.S. Lahaina Quadrangle, 1983.



Map 2 – Tax Map, Zone 4, Section 6, Plat 15, State of Hawaii, Tax Map Division.

Map 3 – Study area location—and Land Commission Awards in vicinity.





LIVING UNIT COUNT

A. TRANSITIONAL HOUSING	
NO. OF BUILDINGS-	1
NO. OF UNITS/BLDG.-	16
TOTAL NO. OF UNITS-	16
FUTURE NO. OF BUILDINGS-	2
NO. OF UNITS/BLDG.-	16
TOTAL NO. OF UNITS-	32
TOTAL TRANSITIONAL UNITS-	48
B. AFFORDABLE HOUSING	
NO. OF BUILDINGS-	1
NO. OF UNITS/BLDG.-	10
TOTAL NO. OF UNITS-	10
FUTURE NO. OF BUILDINGS-	2
NO. OF UNITS/BLDG.-	10
TOTAL NO. OF UNITS-	20
TOTAL AFFORDABLE HOUSING UNITS-	30

PARKING

NO. OF STALLS	78
FUTURE NO. OF STALLS	82
TOTAL	160

SITE PLAN
SCALE: 1" = 40'-0"

LEGEND
- (1) TRANSITIONAL HOUSING
- (2) AFFORDABLE HOUSING
- (L) LAUNDRY BUILDING
- (M) MAINTENANCE BUILDING
- TRASH ENCLOSURE
- FIRST PHASE

N

GYA ARCHITECTS INC.
A DESIGN CORPORATION

WEST SIDE RESOURCE CENTER

LAHAINA, MAUI, HAWAII
DATE: 10/31/00

1

Map 4 – Proposed development for the West Side Resource Center.

INTRODUCTION

We were contacted by Mr. Michael Munekiyo of Munekiyo, Arakawa and Hiraga, Inc. about an archaeological survey for the subject parcel in the late summer of 2000, in order to provide information to satisfy historic preservation requirements for a land use permit. The approximate 5-acre project area lies in portions of the lands of Waine`e, Ko`oka, and Pua`anui in Lahaina District, on the leeward side of West Maui (TMK: 4-6-15: por. 1). It is further identified as Lot-2 of the Waine`e Subdivision, and is located c. 500 feet east (*mauka*) of Honoapi`ilani Highway. Project plans for the property included construction of a resource center and housing for disadvantaged persons, as well as all of the required infrastructure for this development—Ka Hale a Ke Ola (Map 4). The study parcel constitutes a portion of Waine`e Village, a plantation camp established around the turn of the century. The field portion of this survey was carried out in September 2000.

Study Parcel

Natural History

The soils on the study parcel belong to the Pulehu-Ewa-Jaucas association. They are deep, nearly level to moderately sloping, well-drained and excessively drained soils that have a moderately fine textured to coarse-textured subsoil or underlying material. They are located on alluvial fans and in basins. They are further classified as Wainee extremely stony silty clay, 3 to 7 percent slopes (WxB) and Wainee very stony silty clay, 7 to 15 percent slope (WxC). On these soils the runoff is slow and the erosion hazard is slight. Stones cover as much as 3 percent of the surface. Bedrock occurs at a depth of about 36 inches. The soils are used mainly for sugarcane, and a small acreage is used for homesites (Foote, et al., p. 134). This latter reference would be to Waine`e Village.

The project area ranges in elevation from about 38 to 69 feet AMSL. Rainfall is about 10 to 20 inches annually, and the rains occur mainly during the winter months. The temperature ranges from the mid-seventies to the mid-eighties, and is relatively constant the year round.

Vegetation observed on the parcel consisted, *koa haole* shrubs (Leucaena leucocephala), and mango and monkeypod trees. Understory plants included buffelgrass (Cenchrus ciliaris), castor bean plants, and various weed species. Recent clearing, following the demolition of houses within Waine`e Village, had removed much of the previous ground plant community.

BACKGROUND INFORMATION

Historical Background Research

The survey area lies a few hundred meters *mauka* (east) of the present Lahaina National Historic Landmark, and was no doubt associated with the former political and social center indicated by this recognition. In precontact times, Lahaina served as the residence of powerful chiefs—the most notable of whom was Kahekili. The Lahaina District was considered by high chiefs to be a desirable location because of its abundant resources and climate, as well as its proximity to the islands of Lana`i and Moloka`i.

Precontact to mid-1800s

Early historic references to Lahaina District describe a rich agricultural oasis, with *taro*, breadfruit, coconut, and other food crops growing near the coast. *Taro* pondfields were interspersed with fish ponds—all being watered from streams coming down from the mountains. Handy and Handy, 1972, p. 493) refer to the area as extending "about three leagues[1] in length and one in its greatest breadth. Beyond this all is dry and barren".

The name—Lahaina—is said to refer to the "cruel sun"—which is probably a reference to the droughts that effected the surrounding area from time to time (Pukui et al., 1974, p. 127). In precontact times, Lahaina itself was a garden-like area, with *lo`i*, ditches (*`auwai)* and separating embankments creating a verdant landscape. Brackish-water and fresh water ponds (*loko*), were also present. The largest and most significant of these being Loko o Mokuhinia,[2] which lies about 0.5 kilometer to the west (ma*k*ai)of the present project area. Given the limited rainfall on the leeward side of the island, the garden-like quality of Lahaina was a testament to the skill and ingenuity of Native Hawaiians farmers. Ocean resources were also abundant and harvested.

Early visitors commented on the appearance of Lahaina. Archibald Menzies, a naturalist and surgeon on the Captain George Vancouver's vessel, HMS Discovery, reported during the 1793 voyage (Handy and Handy, 1972, p. 493):

---

[1] One league is about equal to 3 miles.
[2] See Appendix A for more on the significance of this lake.

"March 17. On the forenoon of the 17th, I accompanied Captain Vancouver and a party of officers, with two Niihau women to see the village of Lahaina, which we found scattered along shore on a low tract of land that was neatly divided into little fields and laid out in the highest state of cultivation and improvement by being planted in the most regulated manner with different esculent roots and useful vegetables of the country, and watered at pleasure by aqueducts that ran here and there along the banks intersecting the fields, and in this manner branching through the greatest part of the plantation."

When Louis de Freycinet visited Lahaina in 1819, J. Arago also commented on the idyllic appearance of Lahaina (Ibid.):

"The environs of Lahaina are like a garden. It would be difficult to find a soil more fertile, or a people who can turn it to greater advantage; little pathways sufficiently raised, and kept in excellent condition, serve as communications between the different estates. These are frequently divided by trenches, through which a fresh and limpid stream flows tranquilly, giving life to the plantations, the sole riches of the country."

Lahaina's main *taro* lands, were watered by 2 large streams, Kanaha and Kahoma, which ran back into deep steep-sided valleys, the sides of which were "too precipitous for terracing" (Ibid., p. 492).

At the end of the 18th century, Kamehameha I had nearly accomplished the conquest of the Hawaiian Islands. After defeating Maui ruler Kahekili at the battle of Kepaniwai in Iao Valley in 1790, he invaded and took over the leeward side of the island in 1795. Kamakau (1992) described Kamehameha's fleet of war canoes as stretching from Laniupoko on the south, to Mala on the north. Finding Lahaina the ideal place to rest and rejuvenate while preparing for the invasion of Oahu, he set up the first capital of the Hawaii. With the aid of two foreigners, he commissioned the construction of a "Brick Palace" from which to administer and collect taxes. Lahaina was to remain the capital until the middle of the 19th century, when the center of government was permanently moved to Honolulu.[3]

Foreign influence became more and more pervasive following the unification under Kahemameha I. These forces brought commercial, social and religious changes to Lahaina, as well as to the other islands. Lahania was attractive to foreign ships because of the favorable anchoring conditions found in the Lahaina Roads. The first whaling ships anchored off Lahaina in 1819, and the provisioning of these ships soon became a lucrative new venture. Following, a few years later, missionaries from New England were added to the mix, and the wheels of acculturation began to turn even more quickly. In 1832, the missionaries conducted a census stating the population of Lahaina at 4,028 (Schmitt, 1973).

[3] See Appendix A for more on the Kamehamehas in Lahaina.

The Mahele

In 1848, during the reign of Kamehameha III, the traditional Hawaiian land ownership pattern was replaced with a more Western-style system. The Mahele, or division, separated lands into 3 major divisions— Crown lands (lands for the king), Government Lands, and Konohiki Lands. If common people, referred to as Native tenants, had lived on and gained subsistence from a parcel of land, they could claim these lands, which came to be known as *kuleana*.

Land Commission Awards on study parcel

A total of 35 Land Commission Awards are shown on the Tax Map (4-6-15) on which the study area is located. There was no data available for 5 of the numbered LCAs. There are portions of 5 LCAs located on the subject property, which are indicated by an "x" on the following table (Table 1). There are also portions of 2 Land Grants—4686—to H. A. Isenberg, a former manager of Pioneer Mill in the late 1800s, and Grant 725, *Apana* 2 and 3 to Namauu on the subject parcel. Namauu was the konohiki of lands in Kooka, and gave taro and kula lands to his people, prior to the Mahele. Four of the awards which occur on the study parcel have been documented as to land use, using the Waihono `aina database.

Information on land usage on these 4 properties follows:

No. 5458, Manu. Apana: 3. Loi: 27. Kula: 14. 1.5 acres, 10 rods. Kooka, Lahaina.
N.R. 296-297v6
Greetings to the Land Commissioners: I have some lo`is and some mo`o kulas which were given by Namauu, my konohiki, at the time when Kaenaena was the Tax Official for Lahaina.

There are a total of 27 lo`i, they are not large ones but are small.

Furthermore, there are a total of 14 mo`o kula. These mo`os are not long, they are short.

The boundaries of these lo`is and the mo`o kulas are understood by us.

Also, the explanation of the giving of this land to me by Namauu, if this is not clear to you, you can see in the letter claiming land by Namauu.
MANU
Lahaina, Maui, 28 January 1848
F.T. 45-46v7
Luaana, sworn, I know the land of the claimant consists of a piece of kula and 5 lois lying together and 17 lois comprising a section of kalo land mauka. They are all in "Kooka" Lahaina. The claimant received these lands in the days of Hoapili in the early days (of that great man) and he has been in undisputed possession ever since.

Cl. 6205, Olelo. Apana: 2. Loi 6. Kula 3. Houselot 1. Pali: yes. 1.25 acres 26 rods. Kooka Lahaina.
F.T. 102v7
Lazaro Namauu, sworn, I know the lands of the claimant. They are in "Kooka" Lahaina. They consist of 3 kula and 6 lois in one piece and one house lot. The claimant received them from me in the year 1842 and his title has never been disputed.

Claim: 4878-EE to Makaiole, wahine. Apana: 6. Loi: 6. Kula: 5 and Houselot: 1. Puaa, Waianae, Wainee, Lahaina.
F.T. 167-168v7
Manae Wahine, sworn, I know the lands of the claimant in Puaanui, Lahaina. They consist of 6 pieces; one Pahale, two pieces of kula, 5 mo`os of kula, separated in two pieces, once piece of 1 mo`o, and the other 4 mo`os, and the other two in Waineenui, one piece of 5 lois, and the other piece of one loi and kula.

The claimant received the first six pieces from Kakelihi in 1851 and the two pieces in Waineenui in 1831 and her title has never been disputed up to the present time, except for the 5th piece, which was disputed, and taken away by Kahue in 1848, at the first she had 5 mo`os in this piece, but in 1838 she gave it to the King, and in 1848 Kalua, the konohiki, took away the 4 remaining.

Claim: 8587 to Kaupena. Apana: 3. Loi: 2. Kula: 1. Houselot: 1. Puaanui Lahaina. 1.5 acres 10 rods. Koele/Poalima: yes. Stream/Muliwai/River: yes. Pali: yes.
N.R. 470v6 March 5, 1848
Hear ye, Land commissioners of the Government: I hereby state my claim to you which was given by the konohiki. There are one taro mo`o and a house lot. They are at Puaa. Kuakamauna gave his consent. That is my claim.
Respectfully,
KAUPENA

F.T. 174-175v7
Waikele wahine, sworn, I know the land of the claimant. They are in Puaanui, Lahaina. Four pieces.
No. 1 Houselot and kula
No. 2 A section of kalo land
No. 3 of one loi
No. 4 of one loi.

The claimant received these lands from Kauheauanui, the konohiki of Puaanui in 1845, and he has possessed them in peace ever since.

There are portions of 4 LCAs on the study property, as well as portions of two land grants. Two pieces of Grant 725 to Namauu, also run through the property, as well as a section of Grant 4684 to H. A. Isenberg along the mauka side of the parcel (See Map 3). Land Commission Awards 5458, and 6205 lie on either side of the Namauu grant, and are based on land given to the awardees by him. Both were taro lands, as was LCA 8587, adjacent to LCA 5458. The *apana* (LCA 4878-EE: 3) to the north was awarded as pasturage. This area must have had a constant supply of water available prior to the establishment of plantation agriculture, in order to grow *taro*. Today, it is quite dry, and would not be suitable for such usage.

Plantation Era

Sugarcane cultivation began in West Maui in 1849 when Judge A.W. Parsons established and began operating a sugar mill in Lahaina. It was sold to J.T. Gower about 1850, and in 1852, was sold at auction to O.H. Gulick, along with 1,000 acres of land (HRHP, 1974).

TABLE 1

Selected Land Commission Awards in TMK 4-6-15

LCA	Apana	R.P. #	Awardee	Size of award	Location	Land Use
241		410	Sol D. Burrows	0.81 acres	Wainee	
496	1	2759 3340	Popolo	1 acre 2 rods	Puaanui	
5207-B	3		Ulumaheihei		Wainee	Kula lands
5458 x	2	1699	Manu	1.5 acres 20 rods	Kooka	Kula and 5 lois
5832			Kaaumaiewa		Kamani	
6205 x	1	2723	Olelo	1.25 ac. 25 rods	Kooka	Taro lands – 6 *loi*, 3 *kula*
6207	3	2724	Kahaka	2 roods 23 rods	Kooka	Taro lands?
6218	1		Wahine Manae	1.46 acres	Waineenui	
6507	3		Apaa		Kooka	Taro land, kula, houselot
6785			Kaluahinenui	2 acres, 12 rods	Wainee	
6786			Kamohonoho	2.52 acres	Wainee	
6787	1		Hanoumua	1.75 acres	Waineenui	
6794	2	5645	Koalakai		Polanui	
6795	1	No RP	Ukukua	4 acres 2 roods	Polanui	
6796		2728	Kui	1.25 acres	Polanui	Taro land
8587 x	3	5580	Kaupena	1.5 acres 10 rods	Puaanui	Taro lands – 1 *loi*
4878-EE x	3, 4	2737	Wahine Makaiole	2 acres 2 roods 9 rods	Wainee	Apana 3 – *kula* pasture Apana 4 – *kula* pasture

In 1854, a whaling vessel stopped in Lahaina on a return voyage from Tahiti, carrying 2 varieties of sugar cane common in Tahiti. These were given to the U.S. Consul in Lahaina, who planted them in his garden. One variety proved to be hardy and productive in the harsh Lahaina climate, becoming known as "Lahaina" cane. It was the predominant variety for the next 50 years (HRHP, 1974).

In 1859, Henry Dickinson, a Lahaina shop keeper, formed the Lahaina Sugar Company, and a year or so later, Pioneer Mill Company was founded by three partners– James Campbell, Henry Turton, and James Dunbar, on land deeded to them by Benjamin Pittman. In 1863, Lahaina Sugar Company was sold to Pioneer Mill Company after going bankrupt. A third plantation was attempted by Lot Kamehameha and partners in 1870, but was also bought out by Pioneer Mill Company a couple of years later. In 1877, a German ex-ship captain, H. Hackfield, took over as manager of the plantation that represented assets of $500,000 by 1883 (Simpich, 1974, as cited in Graves, 1993, p. A-5).

Henry Turton, one of the originators of Pioneer Mill Company plantation, received permission from the Minister of the Interior of the Kingdom of Hawaii in May of 1882, to proceed with building of a railroad system. Intended to connect distant fields with the mill, it eventually extended north to Napili, and south to Ukumehame.

In the heyday of sugar production, Pioneer Mill provided electricity, water, and medical care to not only its workers, but to the town of Lahaina. It ran the largest mercantile on Front Street, Lahaina Dry Goods. The building was said to have been built as a possible refuge for the Kaiser, prior to World War I. Because of the fact that it was controlled by German nationals in 1917, H. Hackfield and Company, the managing agent for Pioneer Mill, was seized by the government and sold to Americans as America entered World War I. Quickly, the company was renamed American Factors, and later became known as Amfac, Inc.

In the early part of the 20th century, Pioneer Mill controlled c. 12,500 acres of land on the west side of Maui—lands which were considered some of the rockiest of the plantation lands in Hawaii. This rockiness is commented upon in Gilmore's The Hawaii Sugar Manual:

"Owing to the roughness of the terrain, very little cultivating is ever effected with implements drawn by either tractors or mules. Practically all is done with the hoe. Forty percent of the land is so completely covered with rocks that plowing is impossible, and preparing land for planting is done with pick and shovel.

In these fields the rocks are cleared away and built into a series of stone walls from 5 to 6 feet apart and often 3 feet high. These stone walls form the banks of the cane row; and between these walls the ground is softened up with pick and then planted. The soil in these areas, although extremely difficult to get at, is very fertile and yields as great as from 90 to 100 tons per acre can be secured off such fields (1936: 200, in Haun, 1999, p. 15).

Obviously, such work was extremely labor-intensive, and a constant flow of immigrants was needed for the workforce. The first group to come were the Chinese in the early sugar plantation years, followed a generation later by the Japanese, and finally in the 1920s and 1930s, by the Filipinos.

The plantation was basically a feudal system, which provided for all of the workers needs—from housing, to merchandise, to health care and social activity. In this environment, Waine`e Village was established in the early 1900s. The village contained up to 200 houses in its prime in the 1920s. It continued to house plantation employees throughout the pre- and post-World War II years, until it was slated for destruction. In March, 1999, it was announced that Pioneer Mill would cease to plant sugarcane on its vast land holding on the west side of Maui. As each field ripened, it would be harvested, and when all harvest was complete, the mill would be closed down.

The Maui News devoted several pages to the history of Pioneer Mill in its August 29, 1999 issue. At that time, there were 36 homes left standing in Waine`e Village, which made up what was described as the last plantation camp on Maui. The article went on to state that "Until recently, nearly all of the homes were occupied, although...the structures, many of them built in the 1920s, were in poor condition".

Oral Histories

In August of 1999, Munekiyo, Arakawa & Hiraga prepared a draft of the History of Camp Structure and Living Conditions of Wainee Village for AMFAC, Inc. The State Historic Preservation Division, in its review of the proposed demolition of structures within Wainee Village, noted the following "We recommend that a history of the camp structure and living conditions somehow be recorded, to provide a 'picture' of plantation in the village. We understand that this may be one of the last remaining 'camps' on the island. The information would be a mitigation for the 'adverse effect' resulting from the demolition of the remaining structures of the camp." (p. i)

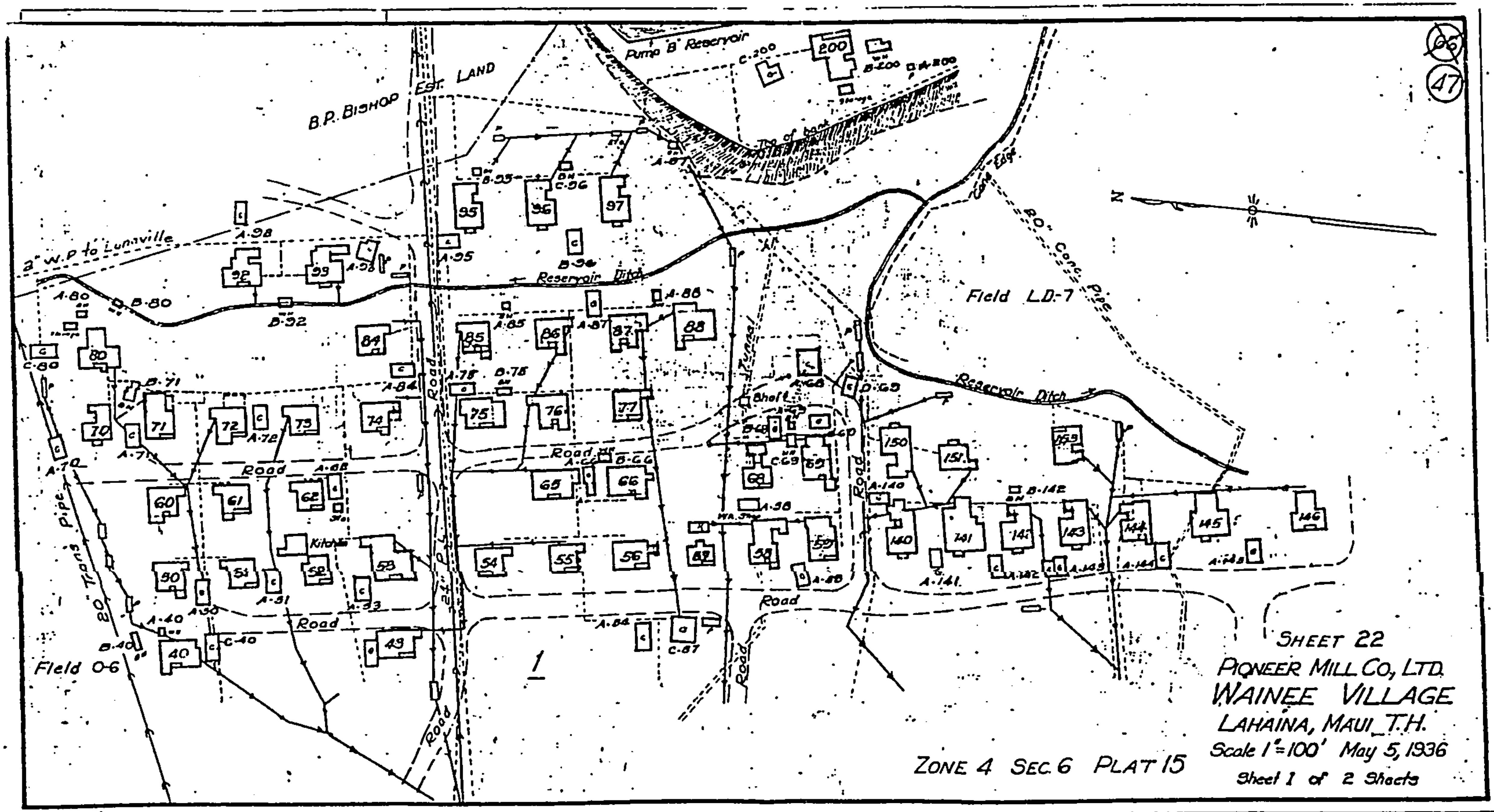
A synopsis of the oral history interviews, conducted by Mr. Gaylord Kubota, have been included in this report to establish the "flavor of the camp" prior to demolition, and provide information on camp activities.

Most of the informants were of Japanese ancestry, and spoke about life in the village prior to World War II. They lived in what was known as the "upper part" of the camp. Theirs was a close-knit community, where everyone looked out for their neighbors. There was no indoor plumbing—folks used a wooded outhouse. Bathing was done in a "furo" behind the house—the water being heated by a wood fire in the winter, and the sun in the summer. Laundry was also done outside, and dried on a clothes line. While electricity came into the camp in the 1930s, most people could not afford appliances such a refrigerators and washing machines. Cooking was done on wood or kerosene stoves. Outdoor wood burning ovens, or "kudos" were another feature reflecting Japanese tradition. There was also a community bathhouse.

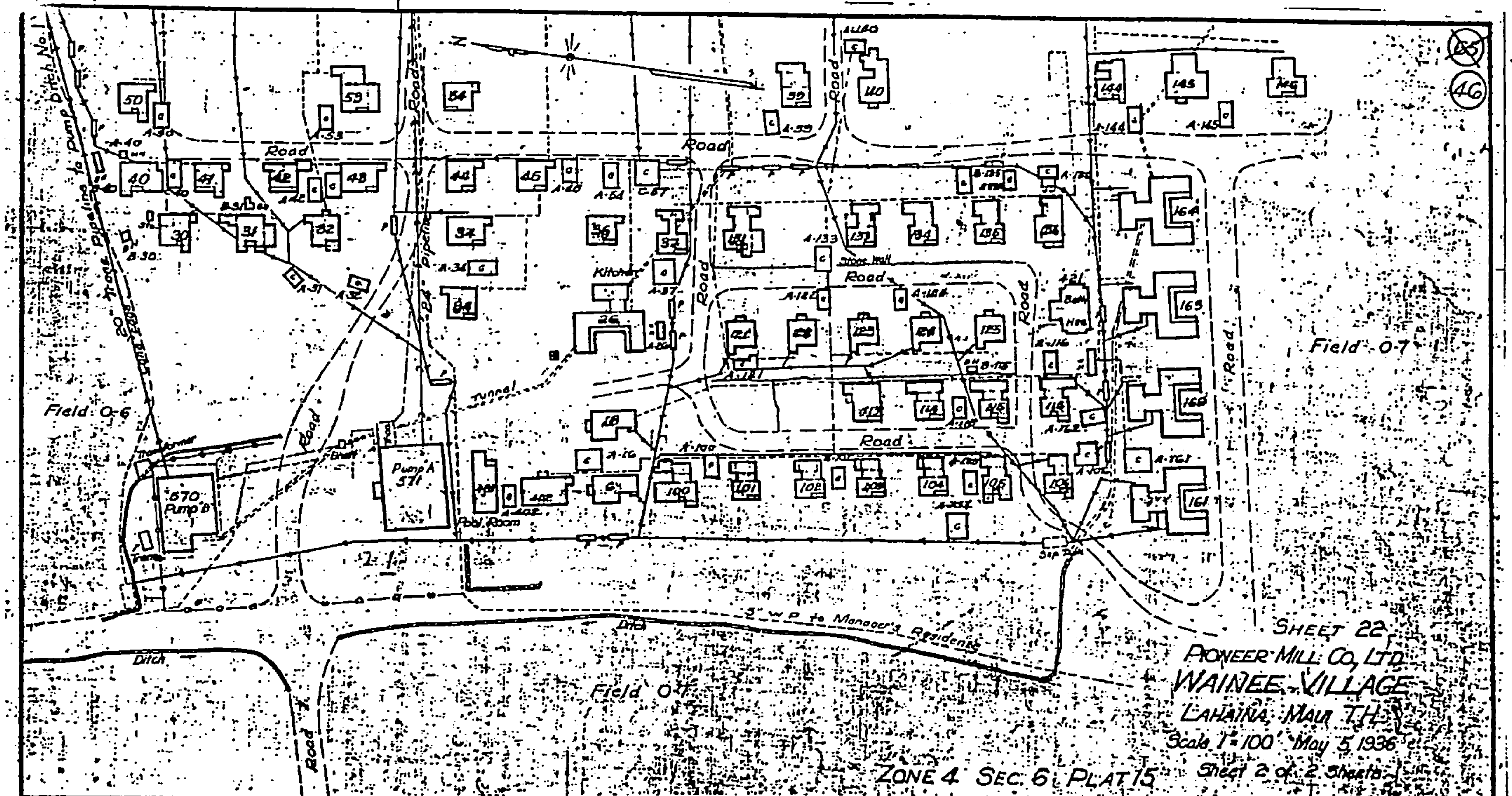
Children played baseball and basketball in recreation areas, and swam in the irrigation ditch ("lua") that ran through camp. There were few formal toys to play with. Empty Bull Duram tobacco bags became bean bags, strings and tin can became telephones. Bamboo pieces became fishing poles. Youngsters also made canoes out of roofing materials, which they paddled in the ("lua"). They fished for tilapia and carp in, and shot birds in the fig trees with homemade slingshots around the "makalua" (upper reservior).

There was a clubhouse where movies, sponsored by Coca-Cola, were shown, and later on chicken fights were staged on the grounds. The children went to Kamehameha III elementary school, and Lahainaluna High School.

Nearly all families grew vegetables and raised chickens. Fruit trees, such as mango, guava, pomegranate, lemon, starfruit, fig trees, and sour sop were grown. Banana groves were also common, and the fruits were shared when supplies were abundant. One informant talked about expeditions into the high valley to a special cave where honey was collected. One Hawaiian gentleman maintained a *taro* patch in the village.



Map 5a – Waine'e Village—upper camp. Pioneer Mill Co., Ltd. 1936.



Map 5b – Waine`e Village—lower camp. Pioneer Mill Co., Ltd. 1936.

World War II significantly effected the camp. Some families were interned by the government. Blackouts were common, and dark paper covered the windows. Food was rationed, as was gasoline.

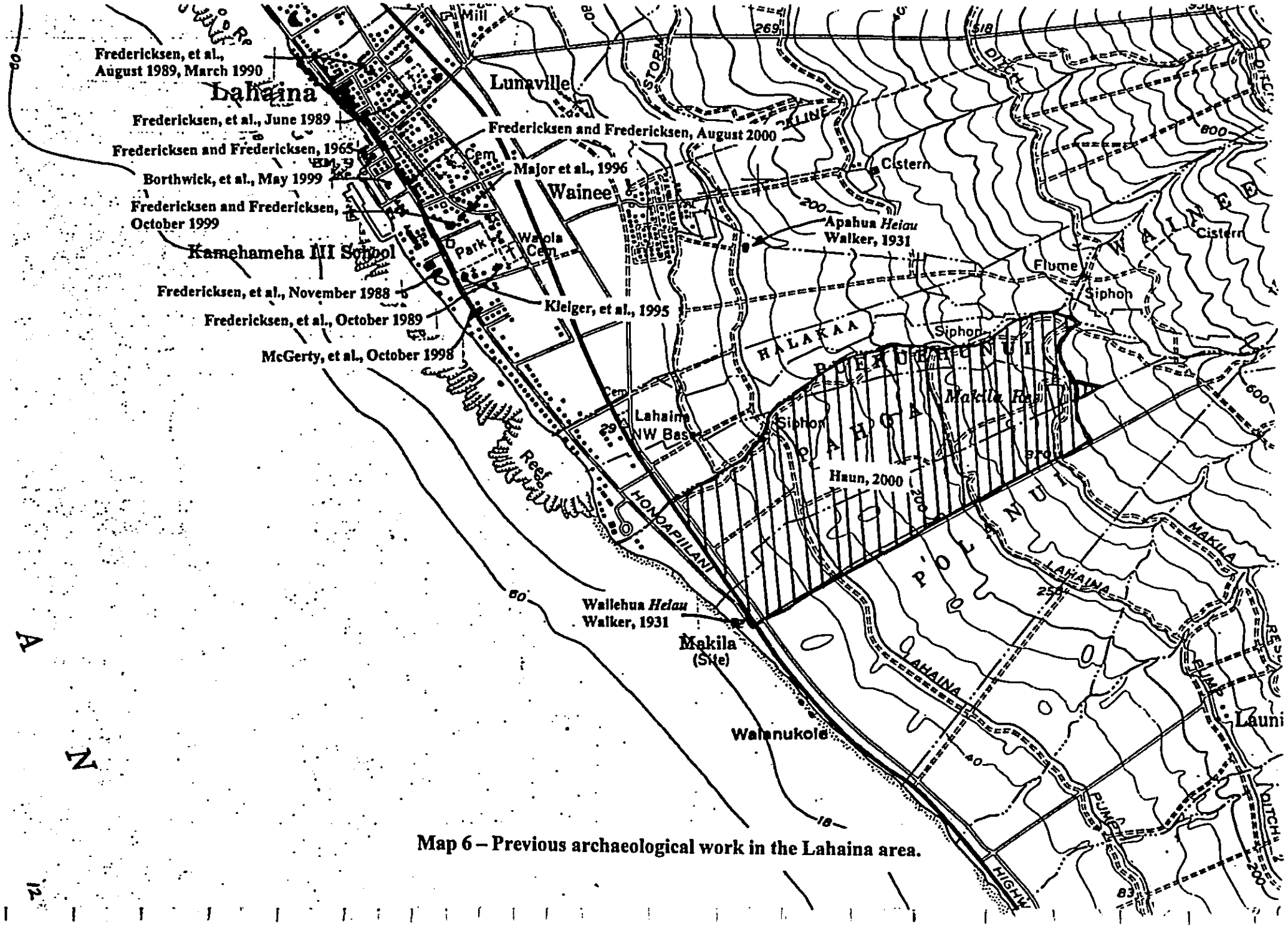
During and after the war, more Filipinos came to live in Wainee Village. They moved into the "lower camp". The husband of one Filipino family was a block warden, who was responsible for several homes in camp. If residents had problems, they went to see him, and his house had a "Block Warden" sign on it. The Japanese and Filipino families kept to themselves for the most part. There were many single Filipino males who stayed at the single men's quarters. This had a community kitchen. Some women cleaned and cooked and did the laundry for them, in order to earn extra money. The Filipino families also raised pigs, and sometimes *taro*, both of which were sold to add to the household income. While there was a general geographical division in the camp, between lower and upper camp, people got along for the most part, and the informants did not remember hostility between ethnic groups. All mention that although the camp had dirt streets, and what looked to the outsider as run down houses, none felt a poverty of spirit in the community. Rather, they talked nostalgically about past times, and how people took care of each other, how doors were never locked, and how things had changed.

Previous Archaeological Studies in Lahaina

The first archaeological work in the Lahaina area was the inventory of religious structures compiled by Winslow Walker in 1929 and 1930 (Walker, 1931). He listed 3 *heiau* in the Lahaina environs—Wailehua *heiau,* located at Makila Beach in southern Lahaina (Site 50-50-03-6), Halekumukalani *heiau,* located in the Puehuehunui cane fields above Lahaina (Site 50-50-03-7), and Apahua *heiau* (Site 50-50-03-08) located in the cane fields above Waine`e.

Wailehua *heiau* is the structure that was dismantled at the death of Queen Keopuolani (Majors et al., 1996, p. 13). The stones were carried from its location at the shoreline to the tomb, Halekamani, which held the remains of the queen until they were redeposited in the mausoleum on Moku`ula. Wailehua *heiau* is described as measuring 130 by 80 feet in Thrum (1909), and was said to have been built by Kauhi-ai-moku-kama, the son of Kekaulike, in or around 1738 (Walker, p. 109).

Halekumukalani *heiau* was a small sacrificial structure (*luakina*) in the cane fields east (*mauka)* of the Pioneer Mill Company railroad. It was totally destroyed at the time of Walker's survey (Ibid.). Apahua *heiau* is another structure that has been totally destroyed by cane cultivation. According to Thrum, it was built by "... Hua-nui, about 50 years later than Hua-a-Pohaku-kaina (Ibid.).



Brick Palace of Kamehameha I

In 1965, Xamanek Researches (Fredericksen and Fredericksen, 1965) undertook a project to determine the nature and location of the "Brick Palace" of King Kamehameha I on Keawa'iki point. This structure was built between 1798 and 1802, calling on the help of 2 foreigners who were in Kamehameha's entourage. With the aid of several historical documents, the location of the building was narrowed to an area immediately *makai* of the Lahaina Library. A *heiau* was said to have existed near the mouth of Pahumanamana Stream, and probably served as the location for the structure. Finds from subsurface testing included the foundation of the brick building. It measured 41 feet by 15 feet.

The remaining brick walls were 1 to 4 courses in height, and the bricks had been arranged in what was called "British bond". The bricks were not imported, but rather manufactured of local clays, probably from the nearby *taro* pondfield, sometimes identified as the "Royal Taro Patch". They were primitively fired, resulting in rather poor quality bricks—some under-fired and some over-fired. Shapes were not always consistent.

The structure was built on a stone platform, probably the unnamed *heiau*, which had been paved with small, waterworn pebbles. The bricks were bonded with a pinkish-colored, poor quality mortar, which was produced by burning coral to lime, and mixing that lime with beach sand and soil. Because of the lack of a solid foundation, the brick structure began to crack and sag, almost immediately after its completion. Consequently, to cover the cracks, the outside of the building was covered with a lime and sand plaster sometime in the 1820s or 1830s.

The archaeological findings corroborated historical observations in terms of the general location, and the nature of the construction. However, the true size of the building was somewhat different from historical records, as most described the structure as measuring 20 by 40 feet.

In 1969 Xamanek Researches re-excavated the "Brick Palace" walls to determine what portions, if any, were still in a state of preservation that was good enough for public display. Additional excavation was also undertaken in the interior of the structure, in order to obtain additional archaeological details and information. Portions of the walls that were still reasonably intact were prepared for display. In the northwest corner of the structure there were 3 to 4 courses of brick that were still *in situ*, and in a good state of preservation. These were exhibited in an enclosure, which was covered with plexiglass. Unfortunately, the prevailing public attitude at that time was not focused on history or preservation, and within a few months of completion of the exhibit, vandals had broken the plexiglass dome covers, exposing the contents. Subsequently, deterioration of the architectural remains of the palace within the display areas took place (Fredericksen and Fredericksen, February 1970), and the exposed features were covered with sand in the 1980s.

Hale Pi`ula

In 1988, Xamanek Researches had the opportunity to conduct subsurface testing at Armory Park—the general location of Hale Pi`ula, the large stone and coral-block "palace". King Kamehameha III began construction of this structure in 1840. Portions of the park that were covered with paved parking and buildings could not be tested at the time. The foundation of the structure was not located, but a large cairn containing masses of burned coral was located on the *makai* portion of the study parcel. This probably represented a" lime kiln" which produced the lime that was used in the construction of the building. It was predicted that the foundation of the building lays somewhere under either the concrete slab on which the modern buildings are situated, or under the parking lot near Front Street (Fredericksen et al., November 1988).

Other archaeological studies in Lahaina Town

Xamanek Researches has conducted additional archaeological projects in central Lahaina—one on Lahainaluna Road (Plantation Inn Site, Fredericksen, et al., August 1989; March 1990) and another on the *makai* side of Waine`e Street near the intersection of Dickenson Street (Aus Site, Fredericksen et al., June 1989).

The Plantation Inn Site was found to be on former cane producing land, and had nearly a meter of topsoil that had been disturbed by this historic activity. A few precontact artifacts were recovered during monitoring for the excavation of the swimming pool, but it could not be determined whether they had been *in situ* at the time of their discovery (Fredericksen et al., March 1990).

The Aus project (Site #50-50-03-1797) was primarily data recovery and the monitoring of a large excavation for the basement parking area of a business office building on TMK 4-6-09: 21. The finds were almost exclusively historic, and were analyzed and placed into 4 historic periods: Late 18th—Early 19th Century; Mid-to-Late 19th Century; Early 20th Century; and Recent. The earliest artifacts consisted of a mix of historic and indigenous artifacts that would be expected at that transitional time period. The indigenous artifacts include, *leho he`e* (octopus lures), a stone bowl probably used for preparing bait, and adze fragments. Mixed with these were fish debris, and 4 flared-lip case gin bottle portions. Also a hobnail-embossed ink well, typical of those used in the late-18th century, was recovered. It was in 2 pieces, each found in a different part of the study area. The other time periods were represented by bottles, porcelain and crockery, which were dated by style, trademarks and manufacture technique (Fredericksen et. al., June 1989).

A monitoring program was carried out by Scientific Consulting Services during the Front Street Renovation project that was undertaken in 1997 and 1998 (McGerty, Dunn and Spear, October 1998). The project involved placement of underground utilities, which required extensive subsurface disturbance. The entire project stretched from Lahainaluna Road to Shaw Street. Many precontact and historic sites, and several

utilities, which required extensive subsurface disturbance. The entire project stretched from Lahainaluna Road to Shaw Street. Many precontact and historic sites, and several precontact burials were encountered during the project work. The findings document a subsurface cross section of Lahaina town.

In January 1999, during part of the restoration of the Lahaina Courthouse, an inventory survey was carried out by Cultural Surveys Hawaii. An inventory survey had been requested by the Maui Cultural Resources Commission, and SHPD, prior to any subsurface disturbance. However, the process was not followed, which resulted in monitoring being the original fieldwork at the site (Borthwick and Hammatt, May 1999 [Draft], p. 1).

A subsurface testing phase was worked out and consisted of 4 backhoe trenches, sampling various areas of the Courthouse grounds. It had been assumed that the entire parcel consisted of historic fill. However, it was soon discovered that a precontact substratum was present, in which artifacts such as adzes, coral and urchin abraders, and volcanic glass were located. Radiometric dating placed this occupation at c. AD 1420 to 1660 (Ibid., p. 44). The site is designated as Site 4754.

Moku`ula

By far the most extensive work was conducted in 1993, by Bishop Museum archaeologists Steve Clark and Paul Klieger. They initiated an archaeological inventory survey and test excavations at the site of King Kamehameha III's residence and family tomb on the island of Moku`ula (Klieger et al, 1995). The abstract (Ibid., p. xviii) states:

"The site appears to have been very important to Kamehameha III, descended from both Maui and Hawai`i Island families. As few meters west of Moku`ula is the site of the Lahaina palace of the great Maui mo`i Pi`ilani of the sixteenth century, as well as the official palace of Kamehameha III, Hale Piula. Recent historical and archaeological inventory and survey research (Phase I) has rediscovered the location of Moku`ula under Malu `ulu o Lele Park. Archaeological excavations have shown that many architectural and other cultural features from the period of royal residence on Moku`ula are very well preserved. Data further indicate that although the fishpond of Mokuhinia is most likely natural, having been in existence for thousands of years, the island appears to have been largely man-made, probably in the early nineteenth century".

Human remains were located in three test units. The remains of an articulated human right foot were identified in a location about 50 meters south of the Royal Tomb on Moku`ula. The presence of metal nails suggests that it was contained in a coffin. Another possible casket burial was located directly within the tomb location. It was not tested to determine whether human remains were still present (Klieger and Clark, 1995).

Loko o Mokuhinia and environs

In 1989, Xamanek Researches undertook an inventory survey on a parcel (TMK 4-6-07: 1) located on the southern edge of Loko o Mokuhinia, adjacent to the Waiola

beginning in the early 20th century and continuing into the 1960s (Fredericksen et al., October 1989).

In 1995, the Bishop Museum conducted an inventory survey on a parcel located *mauka* of Loko o Mokuhinia (TMK: 4-6-07: 13). Surface and subsurface investigations located two sites—the buried remains of a habitation area and possible pondfield (Site 4118), and a plantation-style house possibly dating to 1908 (Site 4119), which was still occupied at the time of the inventory survey (Major et al., 1996). The subsurface habitation area produced domestic artifacts such as bottles, ceramic sherds and metal consistent with a late 19th or early 20 century house site (Ibid., p. 57).

Another parcel, which lay on the northern shore of Loko o Mokuhinia was inventoried by Xamanek Researches in October 1998 (Fredericksen and Fredericksen, October 1999). Subsurface testing located a precontact site remnant (Site 50-50-03-4690) which yielded a radiometric date of occupation at between AD 1475 and 1665. An historic wall was also documented, that appears to have been an LCA boundary wall—one of the few remaining in Lahaina. Additional inventory level work remains to be carried out on a portion of the project area.

An inventory survey of the Kaua`ula Development Parcel to the south of the study parcel, was conducted by PHRI in November 1999. A total of 15 backhoe trenches and one 50 by 50 cm. shovel test were used to test for the potential presence of buried prehistoric deposits on this 230-acre parcel (Haun, 1999, p. 6). Three agricultural sites were located. Two were interpreted as late precontact sites, which may have continued to have been used into the late 1800s, and the third was considered to be historic and associated with sugarcane activity.

In July and August 2000, Xamanek Researches undertook a monitoring program at Kahmehameha III Elementary School grounds. During the project, 10 *in situ* burials, a secondary burial, 10 probable burial features and a habitation site were located (Sites 4983 and 4984). The burials were preserved in place, and the disturbed remains reinterred on the property. Radiometric analysis is taking place at the time of this writing (Report in process).

Settlement Patterns and Expected Findings

Precontact

Numbers of late precontact radiocarbon dates have been obtained from several projects in the Lahaina area (Fredericksen and Fredericksen, 1999; Haun, 1999; Borthwick, et. al., 1999; Majors, et. al., 1996; Kleiger, et al., 1995). These dates suggest the increase of population and intensification of land use during that time.

The settlement pattern in Lahaina area included permanent habitation along the coast and inland within the main drainage areas. In these areas the valley floors were dotted with *lo`i* connected with *`auwai* systems, built and maintained for the production of *taro*. On the valley slopes, and in the areas at the lower reaches of the mountain

dotted with *lo`i* connected with *`auwai* systems, built and maintained for the production of *taro*. On the valley slopes, and in the areas at the lower reaches of the mountain slopes, dry land cultivation took place. Stream water was carried by *`auwai* to a broad band of pondfields near the permanent coastal habitation zone. Along the coast where settlements occurred, it appears that people also concentrated on exploitation of marine resources. In Lahaina, several fishponds existed as well. These inland ponds were formed because the sand beach deposits formed parallel to the shore and kept the run-off water from reaching the sea. Hawaiians took advantage of this natural feature, and utilized the ponds for the production of fish. Two of the prominent fishponds were Loko o Mokuhinia, and the smaller Loko Puako, around which intensive taro and breadfruit cultivation occurred. Dotted among the fishponds and *taro* pondfields, on higher ground, were the homes of the people who worked the land.

Heiau were situated along the coast and on ridge crests on the lower mountain slopes overlooking the coast. Burials occur in coastal sand dunes, in inland caves and hilltops, and in some habitation areas (Haun, 1999, p. 17).

In discussing the settlement patterns of Lahaina, Major states (1996, p. 17):

"We theorize that for most of Lahaina's past, the majority of habitation was along the beach, with secondary habitation/garden sites located inland along the shorelines of the fishponds. Intensive wetland taro production continued mauka of the coastline for about a kilometer or so (Klieger et al. 1995). Terraced fields continued up a few of the more prominent West Maui streams, and these lands probably included at least temporary habitation sites. Kula or open areas along the lower slopes of the mountains were probably ideal for raising dryland taro and sweet potato."

Post-contact

In early post-contact times, Lahaina became the center of the Hawaiian Monarchy. Kamehameha I spent time there, between battles of conquest. His son, Kamehameha III resided in Lahaina in preference to Honolulu. Kamehameha I's wife, the sacred Keopuolani, and his daughter, Nahi`ena`ena were buried there. Many high status individuals connected with the monarchy in one way or another lived in Lahaina, even after the official capitol of the kingdom was moved to Honolulu in 1845. King David Kalakaua and his heirs held title to a Lahaina parcel, two decades into the 20th century. In addition to the Royal presence, European interest in Lahaina increased, beginning with whalers and missionaries, and commercial enterprises. The traditional settlement and land use patterns were changed as people gravitated to Lahaina town. The Mahele altered the traditional land ownership patterns as well.

With the introduction of sugarcane cultivation in the 1850s, and the importation of foreign labor to work in the plantation, the character of Lahaina changed. The sugar plantations acquired either by purchase or lease, large amounts of land, further displacing the people. The acquisition of stream water for sugar cane production dried up any remaining taro fields by the end of the 19th century. Afterwards a pattern of dispersed villages and camps for plantation workers emerged. *Kuleana* land grants changed hands as plantation workers became affluent enough to purchase land from Hawaiians willing to

villages and camps for plantation workers emerged. *Kuleana* land grants changed hands as plantation workers became affluent enough to purchase land from Hawaiians willing to sell. Commercial development became a driving force that would continue and intensify through the 20th century.

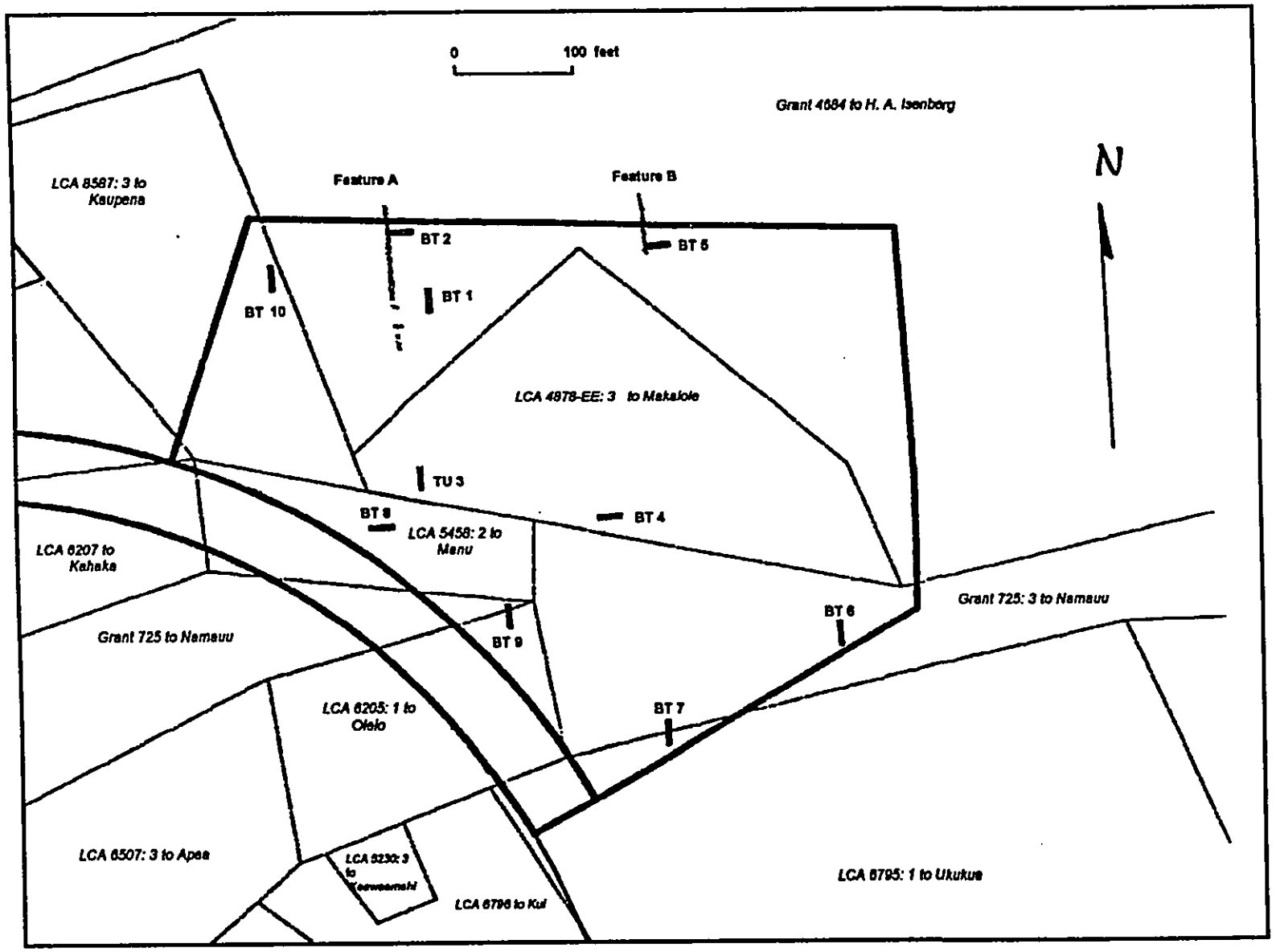
Expected findings based on background research would be possible precontact subsurface habitation sites, perhaps containing human burials. Sugarcane cultivation would have impacted subsurface conditions as well. The extent of surface disturbance connected with sugarcane cultivation, the construction and recent demolition of Waine'e Village Complex, would preclude any expectation of precontact surface finds. However, features such as walls, roads, irrigation ditches, and building foundations associated with the plantation community of Waine'e Village could possibly still be visible.

ARCHAEOLOGICAL METHODS

This archaeological inventory survey was conducted during October 2000. The field team was made up of Mark Donham and Hugh Coflin. Erik Fredericksen was the principal investigator and project coordinator. Walter and Demaris Fredericksen were the senior advisors.

The survey on the 5-acre parcel was carried out in 2 phases—a pedestrian surface inspection and a series of subsurface tests using a backhoe. The pedestrian survey was completed using transect lines spaced c. 5 meters apart, and oriented roughly E-W. Potential features were marked with flagging tape for subsequent evaluation and mapping. The second phase consisted of subsurface investigation and feature inspection.

A total of 10 backhoe trenches were placed on the project area (Map 7). The methodological scheme was to try to place backhoe trenches in several of the locations of Land Commission Awards on the parcel, to see if any associated subsurface cultural indications or materials were present. Backhoe trenches were also excavated near the Feature A and B walls. No manual test units were undertaken because no significant material culture remains were found during mechanical testing. Trench profiles were drawn, and maps compiled using metric survey tapes and hand-bearing compasses. Written notes were kept in the field, and photographs were taken with color film. No material culture remains were transported off-island and standard laboratory procedures and methods were utilized.



Map 7 – Site map showing Features A and B of Site 5042, and backhoe trench locations.

ARCHAEOLOGICAL RESULTS

One previously unrecorded site (Site 50-50-03-5042) was identified during the inventory survey. It consists of 2 surface features likely associated with the historic Waine`e Village.[5]

Feature A

This surface wall is located near the northern border (Map 7; Figure 1; Photos 1-3). It extends for approximately 30 meters in length on the study parcel, and an additional 15 or so meters north, off of the property. It appears to be associated with a plantation camp house foundation remnant, which had been bulldozed.

The wall is in poor to fair condition. It is constructed with 2 to 5 courses of angular and semi-rounded boulders and cobbles, with pebble and rubble core-fill. It runs parallel with a dirt roadway. About 4 meters south of the northern project boundary, a concrete sidewalk entrance is located. The wall is c. 1 meter high at this entrance. It is broken down in several places, but was probably about 1 meter in height when it was built. A large coral block is in place in the northern portion of the feature.

A large boulder is inscribed with "PAGADO FAMILY", and sits in what appears to be the southern corner of the wall feature (Photo 4). This wall feature is interpreted as a boundary marker associated with the historic Waine`e Village community.

Feature B

This feature is also located on the northern border. It is a retaining wall, c. 15 meters in length, 2 to 4 courses tall and constructed with subangular boulders and cobbles. It is about 1 meter in height (Figure 2; Photos 5 and 6). To the east (*mauka*) of this retaining wall is a broad, leveled area, which contains fill soil. This level area may have contained another camp house.[6] Two piles of recent *imu* rocks are located about 5 to 10 meters to the southeast of the end of the retaining wall. On the west side of the feature is a concrete double-sink. There is also a concrete slab near the southern end of Feature B., which has several anchor bolts for some kind of vertical column or pole.

Backhoe Trenches

Ten backhoe trenches were utilized to sample the project area. These trenches ranged from 6.5 to 8 meters in length, by 0.8 meters in width, by a maximum of 1.5

[5] This plantation camp was demolished earlier in 2000 per SHPD Doc. No. 9906CO10.
[6] Remnants of a previously demolished concrete slab were encountered in BT 5.

meters in depth. All trenches were excavated to weathered bedrock. Table 2 provides a summary of backhoe trench results. Each of the trenches is briefly discussed below.

Backhoe Trenches 1, 2, 5 and **10** were excavated in LCA 8587: 3. **Backhoe Trench 1** was excavated near the Feature A wall. Trench orientation was N-S and this 7 meter long trench was excavated through the approximate location of a former building footing.

Two soil strata common to the project area were encountered before weathered bedrock was reached (Figure 3; Photo 7). Layer I was up to 52 cm. deep and consisted of reddish brown (5 YR 5/4) silty loam. This slightly hard, dry soil contained a few subangular cobbles and pebbles. Scattered material culture remains were noted in the upper 30 cm. of this disturbed stratum. These materials included scattered fragments of plantation era ceramic tableware, broken pieces of milled lumber and plywood, scattered pieces of concrete, and some garden hoses. These items may have been redeposited during demolition activities. No material cultural remains were noted in the lower portion of Layer I.

Layer II was encountered between 45 and 52 cmbs. This compact stratum consisted of strong brown (7.5 YR 5/6) silty clay. This hard, dry soil was sterile and yielded increased amounts of weathered bedrock with depth. The trench was abandoned at intact weathered bedrock at 100 cmbs.

Backhoe Trench 2 was placed adjacent to and east of the Feature A wall. It was oriented E-W and was 7 meters long. The 2 common soil layers were present in this trench (Figure 4; Photo 2). Layer I was a maximum of 50 cm. deep, and was made up of reddish brown (5 YR 5/4) silty loam. This slightly hard, dry soil also contained post-contact materials. Observed items in the disturbed upper 20 cm. of this stratum included broken window pane glass, scattered ceramic fragments, rusted metal, and broken milled lumber. It appears that this material was redeposited during the demolition of Waine'e Village.

Layer II extended from c. 45 to 50 cmbs. to the bottom of BT 2 at 95 cmbs. This strong brown (7.5 YR 5/6) silty clay was sterile and contained scattered pieces of weathered bedrock. Excavation was halted in weathered bedrock at 90 to 100 cmbs.

Backhoe Trench 5 was oriented E-W and was utilized to sample an area adjacent to and east of Feature B. A disturbed Layer I and an apparently intact Layer II were located in the subsurface test (Figure 7; Photo 8). Layer I (0 to 64 cmbs.) consisted of a redeposited sublayer (Layer Ia) and a heavily disturbed sublayer (Layer Ib). Layer I was composed of reddish brown (5 YR 5/4) silty loam. Material culture remains present in Layer Ia included scattered modern bottle glass and window pane fragments, a ceramic door knob, a glass marble and pieces of concrete slab. Layer Ib contained scattered pieces of rusted metal and broken bottle glass. A trench for a 5-inch diameter concrete pipe extended from Layer Ib into Layer II.

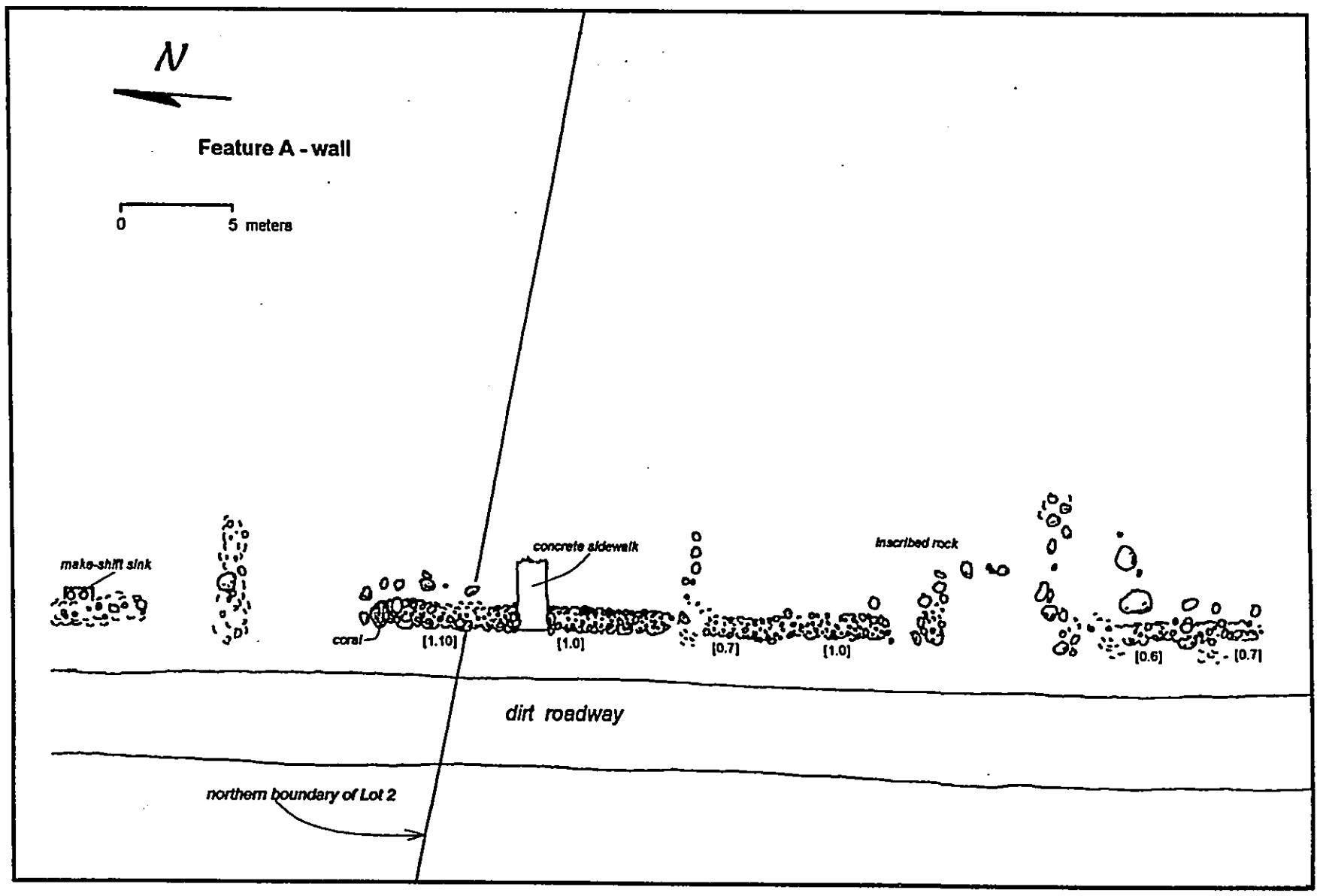


Figure 1 – Feature A – wall. Site 50-50-03-5042.

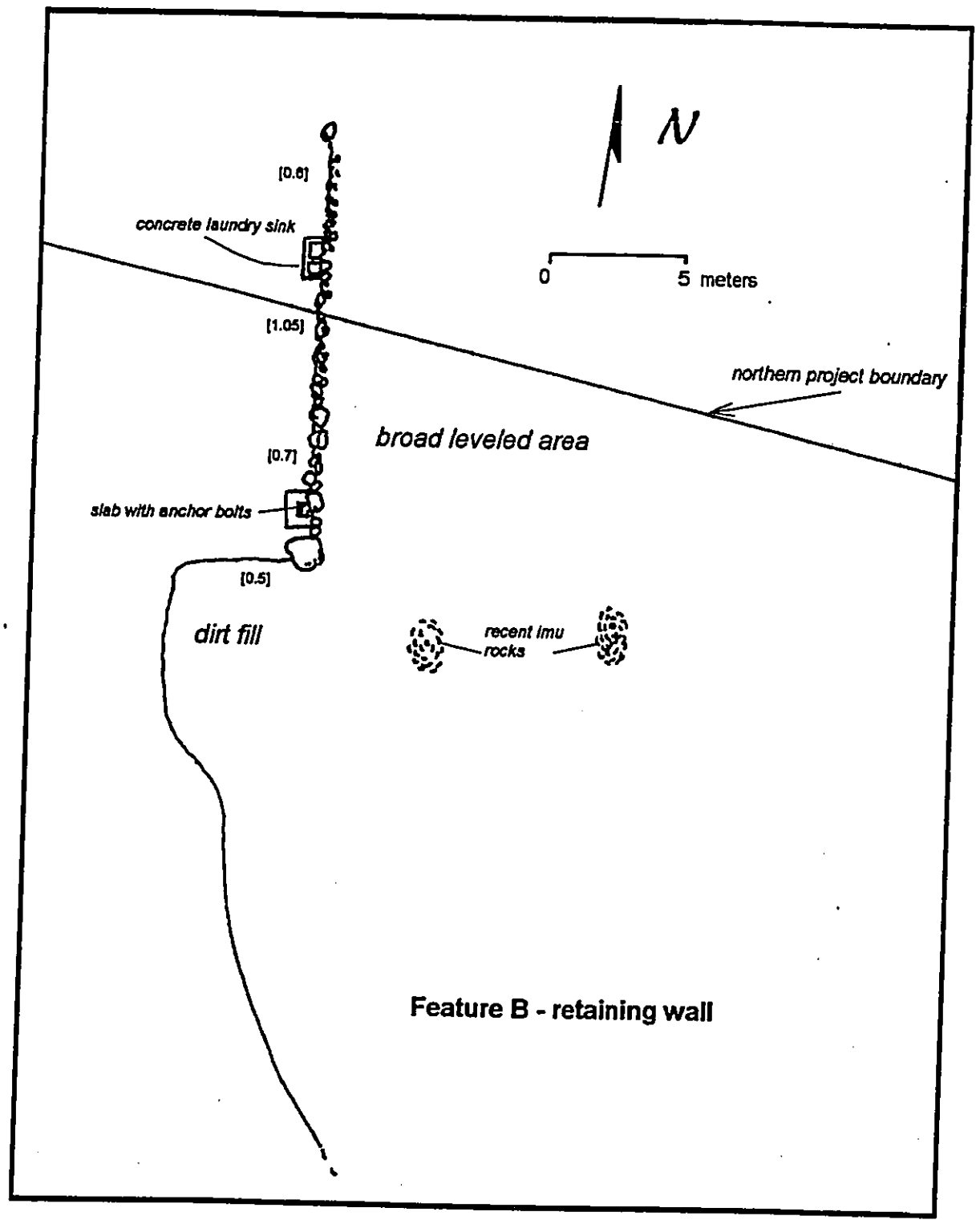


Figure 2 – Feature B—retaining wall.

Layer II was encountered at 50 to 60 cmbs. This strong brown (5 YR 5/6) silty clay appeared to be intact. No material culture remains were noted in the stratum and excavation was halted at bedrock, c. 90 to 100 cmbs.

Backhoe Trench 10 was excavated to the west of the Feature A wall, in the northwestern portion of the study area, and sampled LCA 8587: 3 to Kaupena. Scattered debris and the remnants of an abandoned wooden animal pen were noted in this portion of the project area. Two very rocky and shallow soil strata were present in BT 10 (Figure 12; Photo 10). Layer I was a maximum of 188 cm. thick and consisted of the common reddish brown (5 YR 5/4) silty loam. This compact layer contained a few pieces of scattered, rusty metal.

Layer II extended from 18 cm. to 42 cmbs. No material culture remains were observed in this strong brown (7.5 YR 5/6) silty clay. Excavation was halted at bedrock c. 36 to 42 cmbs.

Backhoe Trenches 3 and **4** were excavated in LCA 4878-EE: 3. **Backhoe Trench 3** was oriented N-S, and **BT 4** was oriented E-W. The 2 common soil strata were encountered in both trenches (Figures 5 & 6). Layer I was up to 85 cm. deep in BT 3 and 30 to 40 cm. deep in BT 4. This reddish brown (5 YR 5/4) silty loam contained post-contact material culture remains. Items encountered in BT 3 included modern bottle glass fragments, isolated pieces of ceramics, broken concrete pieces, and rusted metal. A large (c. 20 cm. in diameter) concrete pipe was also located in BT 3 along with an 8 cm.-diameter iron pipe, a possible concrete septic tank lid, and a fragment of an early 20th century bottle. Materials noted in BT 4 included scattered brown bottle glass and rusted metal fragments. One subsurface feature was also found in BT 4.

Feature 4.1 consisted of a large pit of unknown function. This pit measured 2.2 meters E-W and was a maximum of 1.3 meters deep. The basin-shaped feature contained reddish brown (5 YR 4/4) fill along with numbers of subangular cobbles and scattered fragments of white ceramic, brown bottle glass and rusted metal.

Layer II was encountered between 65 and 85 cmbs. in BT 3 and 30 to 40 cmbs. in BT 4. This strong brown (7.5 YR 5/6) silty clay did not yield any material culture remains. Weathered bedrock increased with depth and both trenches were halted at a maximum depth of 1.5 mbs. in weathered bedrock.

Backhoe Trench 6 was utilized to test Grant 725: 3 to konohiki, Namauu. It was oriented N-S and was 8 meters long. Sugar cane was present on this section of the parcel. Both common soil layers were located in this trench (Figure 8). Layer I was up to 50 cm. deep and had been previously disturbed by plantation agricultural activities. No significant material culture remains were noted in this trench. However, black plastic irrigation tubing and black plastic mulch were found during excavation.

Layer II extended from 50 cm. to c, 120 cmbs. This strong brown (7.5 YR 5/6) stratum was sterile and yielded no material culture remains. The trench was terminated in weathered bedrock.

Backhoe Trench 7 was excavated near the southern boundary of the project area. Land Commission Award 6795 to Ukukua, and Gr. 725:3 were sampled with this N-S oriented, 7-meter long trench. It was located downslope from an old field access road. Both common soil layers were present (Figure 9; Photo 9). Layer I was up to 60 cm. thick. The upper 30 to 30 cm. of this stratum appeared to have been disturbed—probably from the construction of the nearby field access road. The reddish brown (5 YR 5/4) soil yielded broken concrete pieces, scattered ceramic and bottle fragments, a few pieces of bovine bone, a *pipipi* shell (Nerita picea), and 5 pieces of weathered coral. The shell and coral fragments were found near the surface and were underlain by the ceramic, bottle glass and bone.

Layer II was encountered between 55 and 65 cmbs. The common strong brown (7.5 YR 5/6) silty clay was sterile and BT 7 was halted at c. 120 cmbs., in weathered bedrock.

Backhoe Trench 8 was oriented E-W and sampled LCA 5458:2 to Manu. It was placed near the southwestern boundary of the parcel. The area further to the southwest had been previously impacted by grading activities associated with the construction of the planned County of Maui park. Both common soil layers were encountered in BT 8 (Figure 10). Layer I was up to 89 cm. thick and was composed of reddish brown (5 YR 5/4) silty loam. The upper 20 to 30 cm. of this layer appeared to have recently redeposited, probably by the earth moving activities on the adjacent parcel. Observed material culture remains included scattered beverage bottle glass and ceramic tableware fragments, and single *pipipi* shell, a few pieces of weathered coral near the surface, a bovine phalanx, rusted metal fragments, and black plastic mulch.

Layer II was encountered between 70 and 80 cmbs. This strong brown (7.5 YR 5/6) was sterile and excavation was halted at weathered bedrock c. 125 cmbs.

Backhoe Trench 9 was utilized to sample LCA 6205: 1 to Olelo and Grant 725 near the southwestern boundary of the parcel. The area had been previously graded and was heavily disturbed. The 2 common strata were encountered before excavation was halted at weathered bedrock between 100 and 110 cmbs. (Figure 11). Layer I was 70 to 85 cm. thick and was composed of reddish brown (5 YR 5/4) silty loam. The upper approximately 20 cm. of this layer had been recently disturbed by heavy equipment activities. Observed material culture remains included black plastic irrigation tubing, black plastic mulch, rusted metal, and refuse.

Layer II consisted of strong brown (7.5 YR 5/6) silty clay. This stratum was sterile and BT 9 was halted in weathered bedrock between 100 and 120 cmbs.

SUMMARY AND CONCLUSIONS

The pedestrian portion of the inventory survey located 2 structural remnants of the former Waine`e Village. These two remnants have been designated Site 50-50-03-5042. Feature A is a free-standing, core-filled rock wall that appears to have been associated with one or more former plantation homes. Feature B consists of a rock retaining wall, which is probably also associated with a former camp home. Subsurface testing consisted of 10 backhoe trenches. Subsurface results indicate that the project area has been impacted heavily by land altering activities, including sugarcane cultivation and the construction and demolition of Waine`e Village. Material culture remains consisted primarily of debris generated from the demolition of the camp, and plantation era items. There were no recognizable precontact cultural materials found during testing.

While the Land Commission Award data indicated that portions of the study parcel had contained taro *lo`i*, there was no subsurface evidence of taro cultivation identified. The lack of any precontact cultural remnants was consistent with our predictions of findings, since post-contact sugarcane cultivation, followed by the construction of Waine`e Village altered both the surface and subsurface nature of the project area. The features that were found in the study area are walls associated with this plantation camp, and are the only surface features remaining following the demolition of the camp in early 2000.

Site Significance Assessment

Site 5042 qualifies for significance under criterion "D" of the Federal and State historic preservation guidelines. However, both plantation era features have yielded adequate information, and are no longer considered to be significant for their information content.

Mitigation Recommendations

No further archaeological work is deemed necessary for the subject parcel.

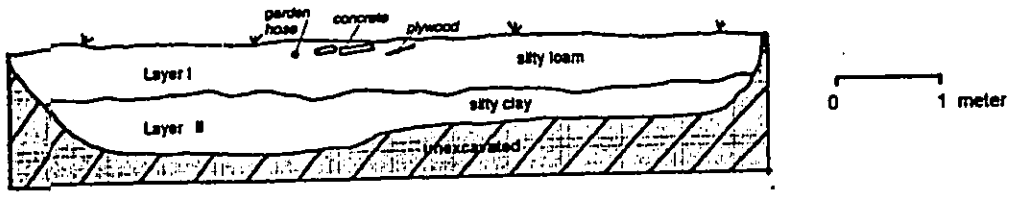


Figure 3 - West wall profile of Backhoe Trench 1.

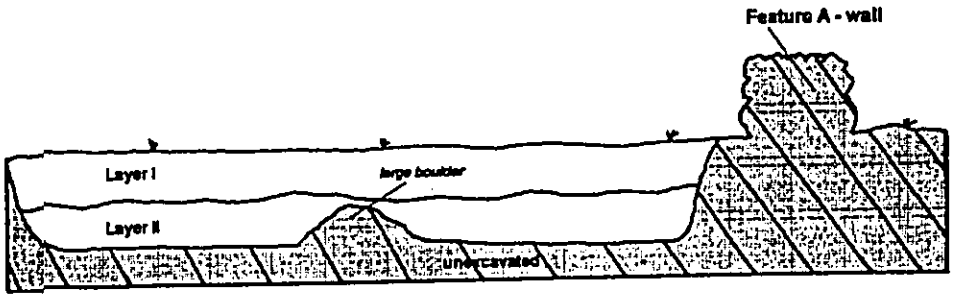


Figure 4 - South wall profile of Backhoe Trench 2.

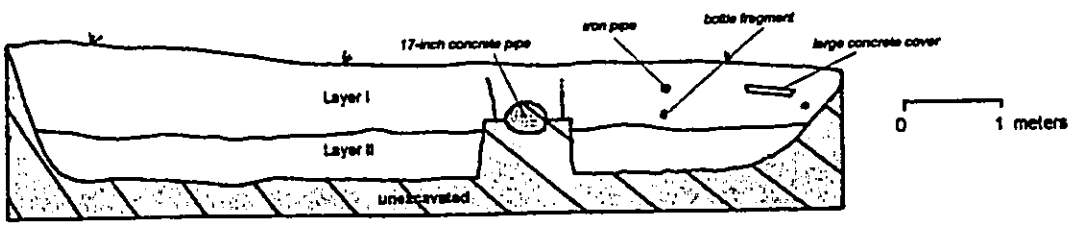


Figure 5 - West wall profile of Backhoe Trench 3.

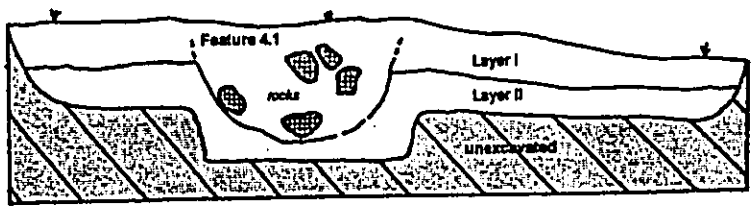


Figure 6 - South wall profile of Backhoe Trench 4.

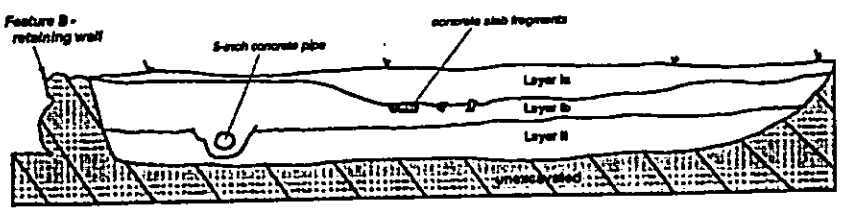


Figure 7 - North wall profile of Backhoe Trench 5.

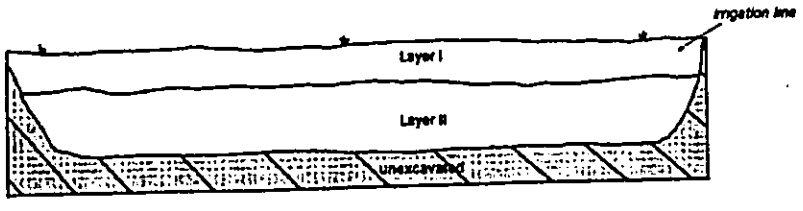


Figure 8 - East face profile of Backhoe Trench 6.

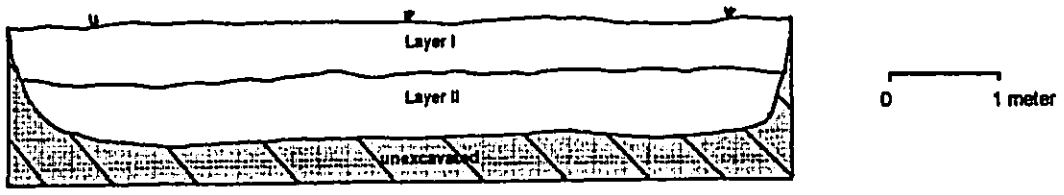


Figure 9 - West wall profile of Backhoe Trench 7.

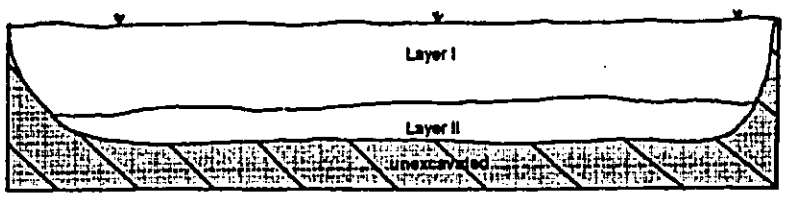


Figure 10 - North wall profile of Backhoe Trench 8.

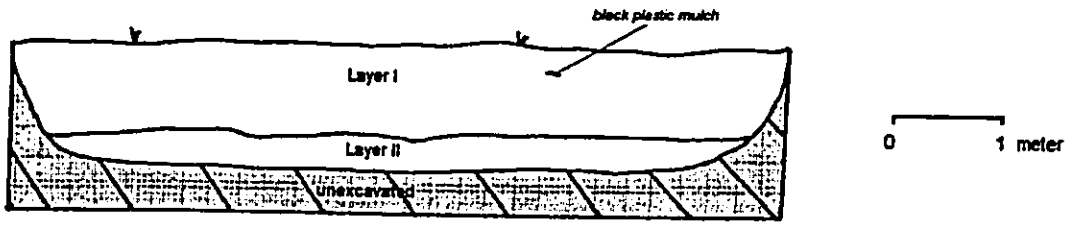


Figure 11 - East wall profile of Backhoe Trench 9.

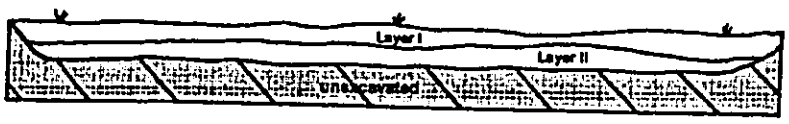


Figure 12 - West wall profile of Backhoe Trench 10.

APPENDIX A

Traditional history

The study area lies within the lands of Waine`e, Puaanui, and Kooka, which lie to the east (*mauka*) of Pakala. This latter area was the home of many high ranked chiefs and later on, members of the Royal family, and is sometimes referred to as Kalua`ehu (pit of the red one). This is in reference to the lizard goddess or *mo`o*, associated with the adjacent Loko o Mokuhinia that was traditionally connected with the Pi`ilani family of Maui through the *mo`o,* or lizard, a deity or *`aumakua* that traditionally took female form.

The *mo`o* of Loko o Mokuhinia were known by several names. One name is Kihawahine. This is also the name of the Maui chiefess who was a daughter of Pi`ilani. Here could be part of the connection that establishes the link to the Pi`ilani family. Kihawahine was the older sister of Kiha-a-Pi`ilani, a future king of Maui. Their sister Pi`ikea married Umi-a-Liloa, the descendents of whom formed the royal line on the island of Hawaii (Klieger et al., 1995, pp. 20-21). Kihawahine lived most likely in the latter part of the 16th century.[7]

Upon the death of Kiawahine, it is said that she was transformed into the *mo`o* named Mokuhinia. Kamakau (1991, p. 85) records that Chiefess Kihawahine was transformed into a *mo`o* named Kalanainu`u. Mary K. Pukui maintains that Kihawahine was deified and made a *mo`o* goddess after her death. This *mo`o* goddess became one of Kamehameha I's favorite goddesses, and served as a "land holder" deity (Klieger et al., 1995, p. 22). According to Kamakau (1991, P. 85) Kihawahine, as a *mo`o,* had the *kapu moe,* and was the *akua* of the high chiefesses of Maui during Kamehameha I's time.

A possible representation of Kihawahine was recovered from the Island of Hawaii in 1885[8]. It is reported that Kamehameha I carried this image around the islands on the Makahiki circuit. The female image had bleached hair and was once decorated with feathers. Its eyes were inlaid with pearl shell, and human teeth lined the mouth. It is also stated that the image was wrapped in a turmeric-dyed *tapa* cloth (Klieger et al., 1995, p. 26).

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[7] Another factor linking the Pi`ilani family with Loko O Mokuhinia, is the location of Pi`ilani's residence, which lies directly *makai* (Klieger et al., 1995, p. 20-21)

[8] The image of Kihawahine was drawn by Robert C. Barnfield, and is shown in Klieger et al., 1995, p. 25.

The Kamehamehas in Lahaina

In the latter part of the 18th century a series of battles intended to unify all of the islands ensued, seriously disrupting the landscape and lifestyle of many areas of the archipelago. Lahaina did not escape this destructive struggle. Klieger comments on the warfare (1995, et al., p. 14):

"In the mid-eighteenth century, Alapa`i-nui of Hawaii went to war against the O`ahu Mo`i Peleioholani on Maui, and focused his energies on Lahaina. The tactics were somewhat unusual—Alapa`i dried up the streams of Kaua`ula, Kahana, and Kahoma (probably the sources of water for Mokuhinia), toppled the terraces and `auwai, and destroyed the productive capabilities of the lo`i system below (Kamakau 1992:74). It is not certain if Lahaina agriculture and aquaculture rebounded between the numerous battles for interisland supremacy. But years after Alapa`i's destructive path, Lahaina productivity still seemed marginal: Portlock confirmed in 1786 that western Maui had been devastated by the wars of unification (cited in Speakman 1978: 72-73). Lahaina then appears to have had little in the way of provisions to offer the passing explorers, perhaps much less to feed itself."

In 1795, Kamehameha returned to Lahaina to provision his war fleet before continuing on to conquer the islands of Moloka`i and Oahu. Following the unification of those islands, between the years of 1798 and 1802, Kamehameha commissioned the construction of a "Brick Palace" which was built at Keawa`iki point in Lahaina. The building was reported to have been built by two foreigners—Mr. Miller and a man named "Black Jack" Keaka. They had been living on Oahu prior to Kamehameha's invasion of that island in 1796, and following the battle of Nuuanu, they joined his side. The structure was two stories in height, and measured 41 by 15 feet[9] on the outside.

Kamehameha used the "Brick Palace" as his encampment headquarters during his residence on Maui in the year of 1802, while waiting for the assemblage of his fleet of war canoes to carry out the invasion of Kaua`i. Several historians suggest that the building was built as a residence for Queen Kaahumanu, but she apparently refused to live in it. She instead preferred to live in a traditional *hale pili* located a few feet to the south. A retinue of about 1,000 people accompanied the King and Queen during their stay. Their encampment probably extended southward to Loko o Mokuhinia.

By this time Lahaina had rebuilt most of its war-ravaged infrastructure, and was once again productive. A large taro pondfield *mauka* (east) of the "Brick Palace" produced this sacred food for the royalty, and is referred to as the Royal Taro Patch in several sources.[10]

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[9] Several historians gave the measurements as 40 by 20 feet. The actual measurements were established during archaeological excavations undertaken in 1965 (Fredericksen and Fredericksen, 1965).

[10] Akoni Akana, President of the Friends of Moku`ula, and Hawaiian cultural specialist, says that the reference is because the King himself actually worked taro there, demonstrating to his people the value and sacredness of physical labor (personal communication, 1998).

After leaving Lahaina to wage an unsuccessful battle to gain control of Kaua`i, Kamehameha established his court in Honolulu. On several occasions he revisited. In 1812, he stopped to collect tribute at the time of the Makahiki, and appointed his brother-in-law Kahekili Ke`eaumoku[11] as governor of Maui (Klieger et al., p. 17).

Captain Louis Claude Desaules de Freycinet visited the encampment at Keawa`iki in 1819, shortly after the death of Kamehameha. He observed the following (Klieger et al., p. 17):

"We landed at Rahaina and immediately visited the water supply [probably Pahumanamana Stream] and chose a suitable place to set up our observatory. The governor, Keeaumoku, came with us, and allowed us to use the platform of a neighboring morai [heiau], and of a red brick house to set up our instruments. The red brick house was built by Tamehameha, who had originally wanted it to be a store, but the construction was so defective that, hardly finished, it began to sag in plain view. To the south was the habitation of the priests, and right next to it, a morai, constructed on a platform of stones, forming a sort of platform on the beach. The governor made our observatory taboo, so that we would not be bothered by curious onlookers. [Freycinet 1827-1839]".

While Kamehameha I moved the center of government to Honolulu, other members of the royal family remained in Lahaina. Kamehameha I died in 1819, and his son, Liholiho was crowned Kamehameha II. Liholiho's mother, Keopuolani, the last of the female *ali`i* whose power was sacred, continued to reside in Lahaina. In 1823 she died at the age of 54. Prior to her death she had requested a Christian funeral—issuing the strongest prohibitions against all traditional funeral customs—save wailing (Klieger et al., p. 33). She was probably entombed at Halekamani, which was located near the beach in the royal compound of Pakala. The Reverend Hiram Bingham wrote that:

"...her remains were deposited in a very tight stone and mud house. Around the house was built a stone wall from 6 to 12 feet thick, and from 4 to 10 feet high. This was a great work. The stones were all carried by hand, a distance of about a mile, and then laid in clay."[Ibid., p. 36]

Other observers noted that mourners formed an encampment around the tomb, in an effort to remain close to the beloved queen. Kaumuali`i, the ruler of Kaua`i and husband of Kaahumanu, died in 1823, and had requested prior to his death that he be laid to rest beside his friend, Keopuolani. In 1825, when the bodies of Kamehameha II and his queen, Kamamalu, were returned to the islands following their deaths from measles in England, their coffins were taken ashore at Lahaina. Here they lay in state for a short time—next to the coffin containing the remains of the king's mother. The entourage was joined by Princess Nahi`ena`ena and Kauikeaouli, now King Kamehameha III, for the final funerary trip to Honolulu.

[11] He was the brother of wives Ka`ahumanu and Kaheiheimalie (Barrere, 1975, p. 23).

Princess Nahi`ena`ena lived near her mother's tomb, in Pa Halekamani, preferring Lahaina to the capitol in Honolulu. She was married at Waine`e Church in 1835 to her father's daughter's (Kiliwehi) son, a young Big Island chief named Leleiohoku. Following her marriage she then moved to Honolulu, and soon became pregnant. Some said that the child was fathered by Kauikeaouli, as their marriage would have been customary had the missionary influence not been so pervasive. Nahi`ena`ena gave birth to a child who died shortly afterward. She never recovered from the pregnancy, birth and death of her child, and died herself on December 30, 1836.

Her body was returned to Lahaina, and a stately funeral procession wound through the town ending at Halekamani. There her remains were deposited next to those of her mother (Klieger et al., p. 52).

Kamehameha III (Kauikeaouli) immediately began to construct a mausoleum for his beloved sister at Moku`ula, the royal island in Loko o Mokuhinia. When completed her remains and possibly those of her deceased child, along with the remains of Keopuolani and other *ali`i*, were relocated there. Kamehameha III lived on the island for the next eight years—distancing himself from the pressures of government that existed in Honolulu, and allowing others to attend to the affairs of state.

In 1837, a missionary wife named Andelsia Lee Conde wrote about the tomb at Moku`ula:

"...The room was a large chamber elegantly furnished with chairs, tables and large mirrors set under them, beautiful china matting and a small organ upon which he played for our entertainment. Nearly in the center of the room was placed a bedstead nearly the magnitude of 3 common bedsteads. Upon which was a bed neatly spread, and upon this were placed the three coffins, side by side, most splendidly ornamented. Each of these corpses were enclosed in 3 coffins—the first zinc—the second lead and the third or outside one of wood. These were covered with scarlet silk velvet, put on with a multitude of brass nails—gilded plates, with their names & c. upon them, and various gilded ornaments, that gave us almost the impression but that of a tomb. ..." [cited in Ibid., p. 55]

King Kamehameha eventually married Kalama, who bore him two sons, both of whom died somewhere between 1839 and 1842.[12] The sister of his new *aikane* [Keoni Ana (a.k.a. John Young II)], bore Kamehameha III twin boys, although the two were not married in the Christian sense. One of the twins was Albert Kunuiakea Kuka`ilimoku (1851-1903), the only royal child that survived infancy. Although raised by Queen Kalama, the grandson of Kamehameha I was treated with scorn by the Calvinist Christians, even though he served as a House representative in 1880 (Ibid., p. 65).

[12] Named Keaweawe`ulaokalani I and II, these were the last immediate family members of Kamehameha III to be placed in the tomb at Moku`ula (Klieger et al., p. 65)

In 1840, Kamehameha III began building a western-style coral-block "palace" called Hale Pi'ula (House with the Iron Roof). A reference to the structure is found in Thrum's Almanac (1907, p. 173 in Fredericksen, et al., 1988):

"There was an attempt at a building of a so-called palace which answered for a time as the show place, a name which should properly attach itself to royalty. It was also occupied part of the time by the court of the kingdom. It was more of a curiosity than an adornment. It seemed out of place amid all the tropical profusion and exuberance of natural life to see this building intruding into the atmosphere. With some idea of making the building larger, they undertook to double its length and made a still further blotch on the landscape. Fortunately so far as beauty was concerned it was partly dismantled and never finished and remained quite a conspicuous figure on the beach. However, in later years, they had to transport its stones to the premises of the old for where they now appear in the government building which is much more in harmony with the surroundings."

The Polynesian, in a July 25, 1846 article, reports that:

"Lahaina contains many excellent and unoccupied houses which would find ready tenants could they be transported to Honolulu. The palace, as a huge graceless, incomplete, two-story building, encircled by a wide verandah... is a monument of a waste of government means which do credit to some old and dissolute monarchy verging to its downfall. Its site is the sandy beach, instead of, as it might have been had taste been consulted, a quarter of a mile back, amid one of the many beautiful groves that give Lahaina so picturesque an appearance. Mr. Baldwin's church and the adjoining house are most delightfully situated in this respect and are quite unique in their tout ensemble, for Hawaiian scenery. The white turrets of the church peer through the trees most prettily. But this palace, on which work seems to be still going on, is on a scale to accommodate a population in itself, nearly as large of that of Lahaina. The interior is not only wretchedly arranged as to rooms, but positively mangled; special pains being manifest to prevent ventilation, and make as many ill-shaped and comfortless apartments as possible."

Judging from these comments, few were impressed with the building. By 1848 it was being used as a courthouse—until it was severely damaged by *kauaula* winds in 1858. Some of the remaining stones and coral blocks were incorporated into the Lahaina Court House, which still stands in Lahaina overlooking the small boat harbor (Fredericksen et al., 1988). Other coral blocks found their way into structures elsewhere in Lahaina.

In 1845 the royal court moved back to Honolulu. Kamehameha III took his trusted friend Keoni Ana and his wife, Julia Alapa'i[13] along with him. In that same year, upon the death of dowager Queen Kekauluohi--*hanai* mother of Queen Kalama and the

[13] Julia Alapa'i is the granddaughter of Alapa'i-nui, the king of Hawaii who ravaged Lahaina in the mid-1700s.

last female *kuhina nui*[14]--Kamehameha III appointed Keoni Ana *kuhina nui* (Klieger et al., p. 69).

Keoni Ana became the Minister of Interior, and carried out the land reform known as the Mahele in 1848. King Kamehameha III died on December 16, 1854—leaving behind a constitutional government and a totally new land system (Klieger et al., p. 71).

Discussion

The significance and sacredness Lahaina was established long before the unification of the islands by Kamehameha I. The Pi`ilani family lived in the Lahaina area, *makai* of Loko o Mokuhinia, probably near the location of Kamehameha III's Hale Pi`ula. Another connection to Mokuhinia comes with the legendary transformaion of Pi`ilani's daughter into the *mo`o*, Kihawahine. This deity became the *`aumakua* of Kamehameha the Great, who probably carried an image of her with him as he traveled around the island at Makahiki time. Prior to the arrival of Kamehameha, Kahekili had been ruler of all of the islands except for Hawaii. He maintained his home and royal court at Lahaina until his death in 1794.

After Kamehameha made Lahaina the capitol in 1802, the area between the point (Keawa`iki) on which he built the "Brick Palace", and Loko o Mokuhinia became the residences of chiefly families associated with the Kamehamehas. Keawa`iki lies *makai* of the present study parcel.

The royal court moved to Honolulu, but Lahaina still remained an inportant place, especially after the succession of King Kamehameha III to the throne. During the tumultuous times following the deaths of Kamehameha I and II, Kamehameha III often retreated to Lahaina and Lake Mokuhinia and the royal island within the lake—Moku`ula. On this island he built a mausoleum for his mother, sister, and other *ali`i* connected with the royal family.

After the death of his sister, he remained in Lahaina until 1845, when the court was permanently moved to Honolulu. Lahaina continued to be the residence of important people throughout the 19th century. King David Kalakaua held title to property north of Loko o Mokuhinia, and his heirs kept title to the land for two decades into the 20th century. William Charles Lunalilo (later King Lunalilo) also held title to a property in this area as well as a LCA (8559-B) near the present study parcel.

By this time, forces of Christianity and commercialism had transformed the Hawaiian system of social stratification. Social status began to be based on acquired wealth, rather than on birth and rank. Chinese and Japanese laborers were imported to work in the sugar industry, and these immigrant groups settled in ethnic clusters

[14] Kaahumanu was the first, followed by Kina`u. Kekauluohi was appointed *kuhina nui* after the death of Kina`u in 1838. Kekauluohi was the daughter of Kaheiheimalie, who was a sister of Kaahumanu. Kaheiheimalie was married to Ulumaheihei Hoapili, the governor of Maui. Kekauluohi's father was a half-brother of Kamehameha I (Kame`eleihiwa, 1992, p. 125).

throughout Lahaina. The sacred Lake Mokuhinia dried up as water was diverted to irrigate sugarcane production in the fields to the east, as Lahaina shifted to more of a commercial than governing center toward the latter half of the 19th century.

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Photo 1 – Feature A wall, Site 5042. View to the southeast.

Photo 3 – View to the southeast of collapsed portion of Feature A wall. Note concrete walk in lower left corner of photograph.

Photo 2 – View to the west of Backhoe Trench 2, Feature A in background.

Photo 4 – Close-up of rock with "Pagado Family" inscription.

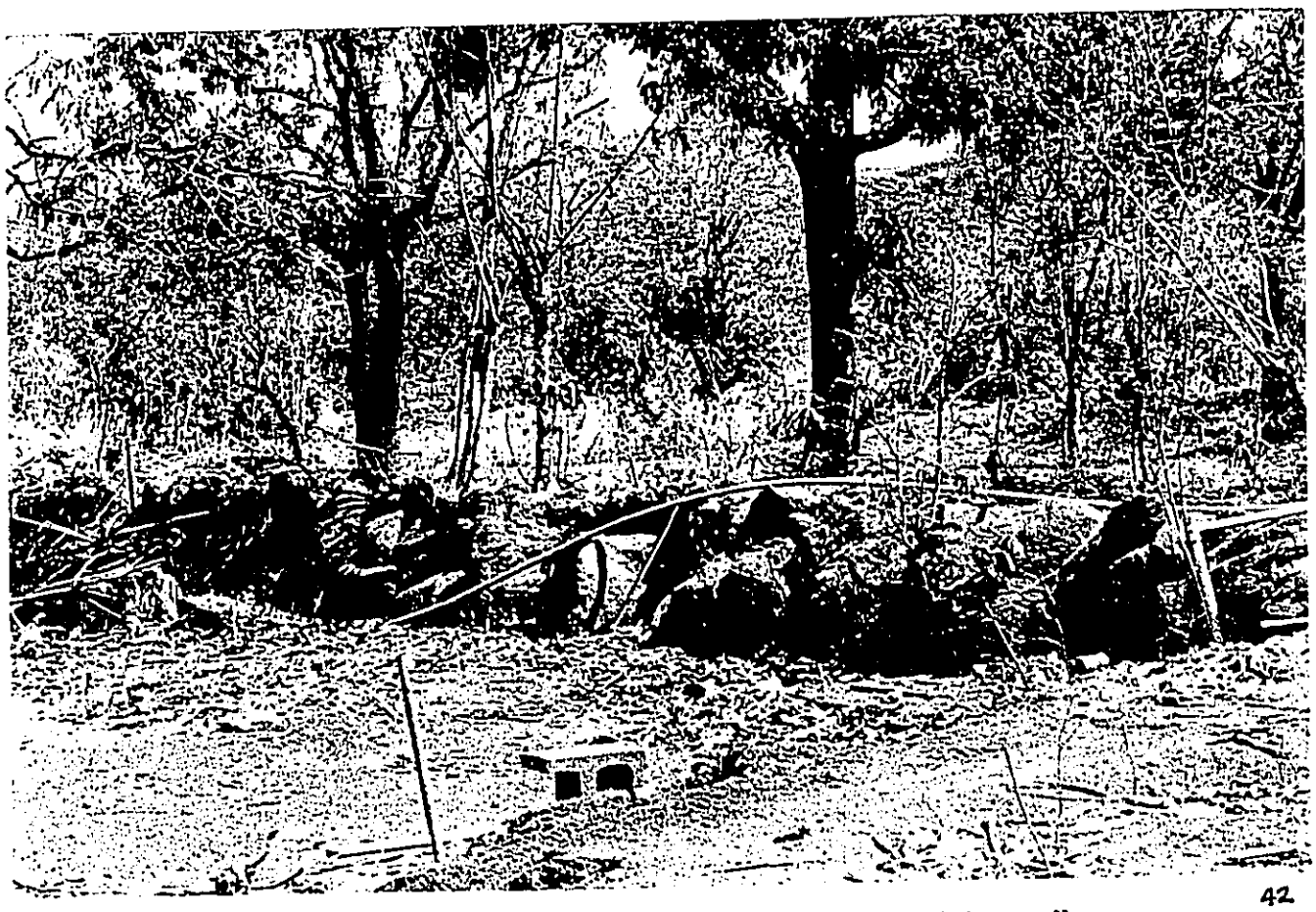


Photo 5 – View to the northeast of Feature B retaining wall.

Photo 6 – Northern section of Feature B retaining wall, showing concrete sink.

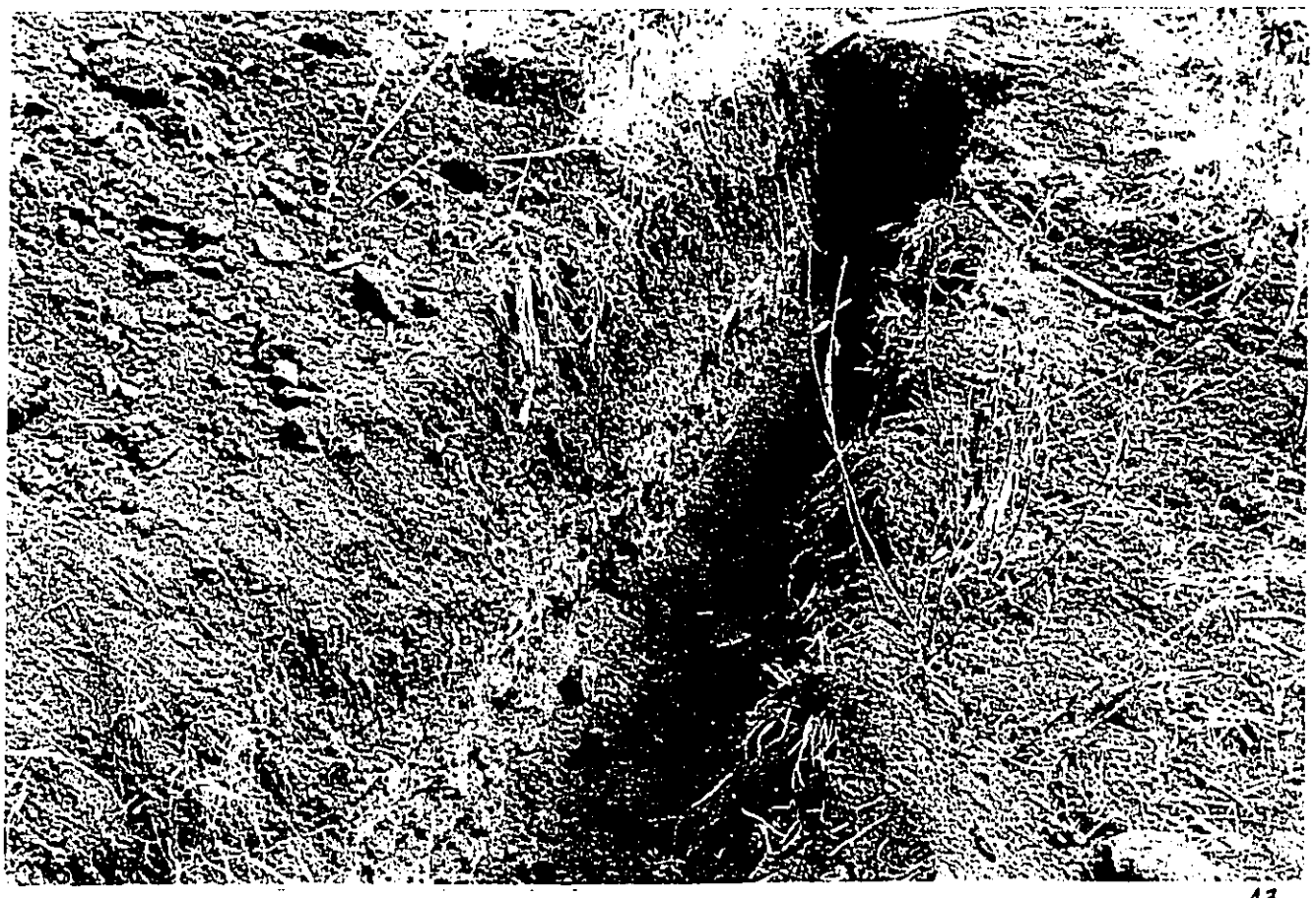


Photo 7 – View to the west of completed Backhoe Trench 1.

Photo 8 – View to the south of Backhoe Trench 5.

Photo 9 – View to the south of Backhoe Trench 7—excavation in proces

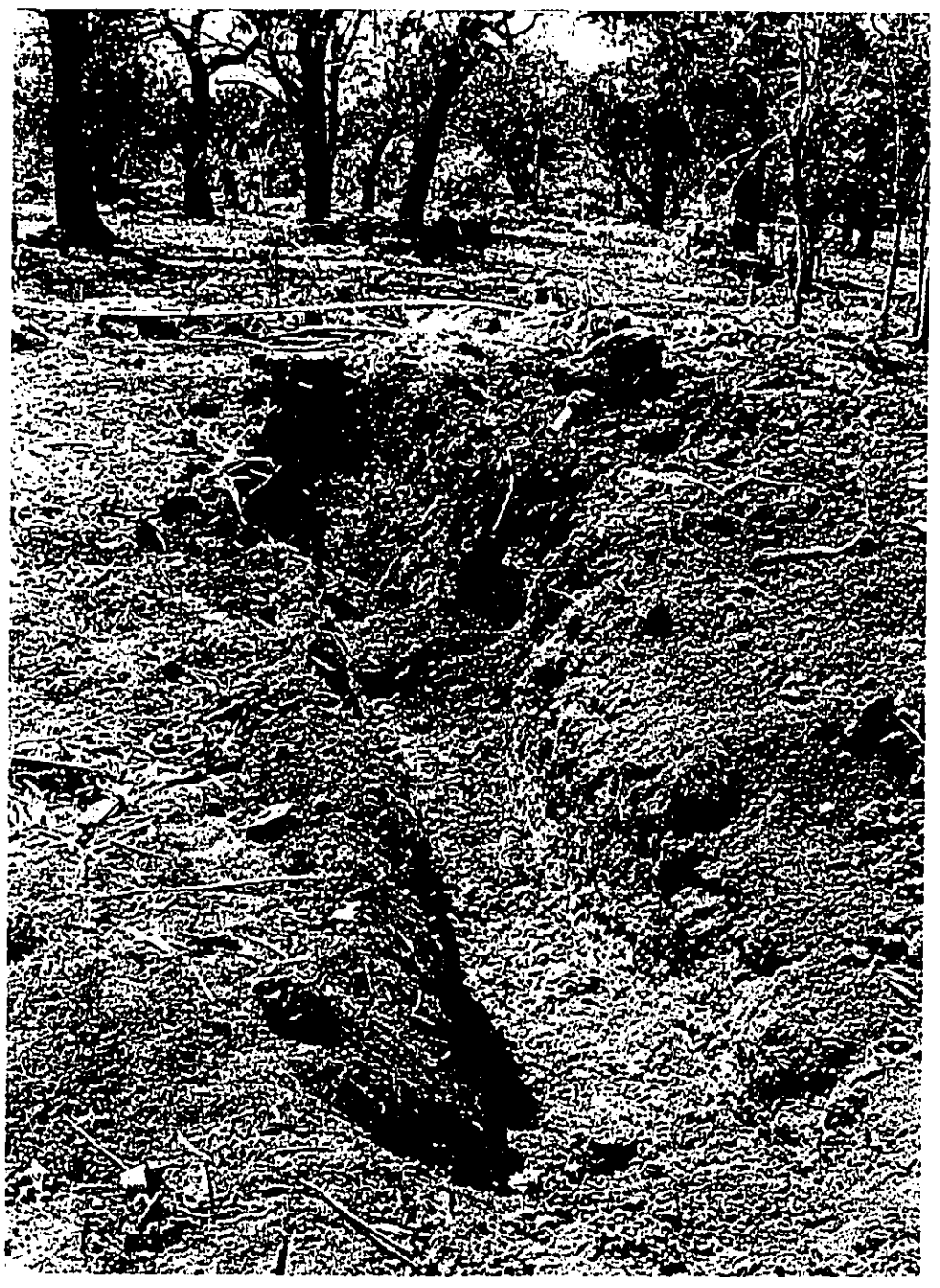


Photo 10 – View to the north of Backhoe Trench 10—excavation completed.

Appendix C-1

Cultural Impact Assessment

Cultural Impact Assessment
For the Proposed West Side Resource Center, Lahaina, Maui
(TMK: 4-6-15: por. 1)

Prepared for:

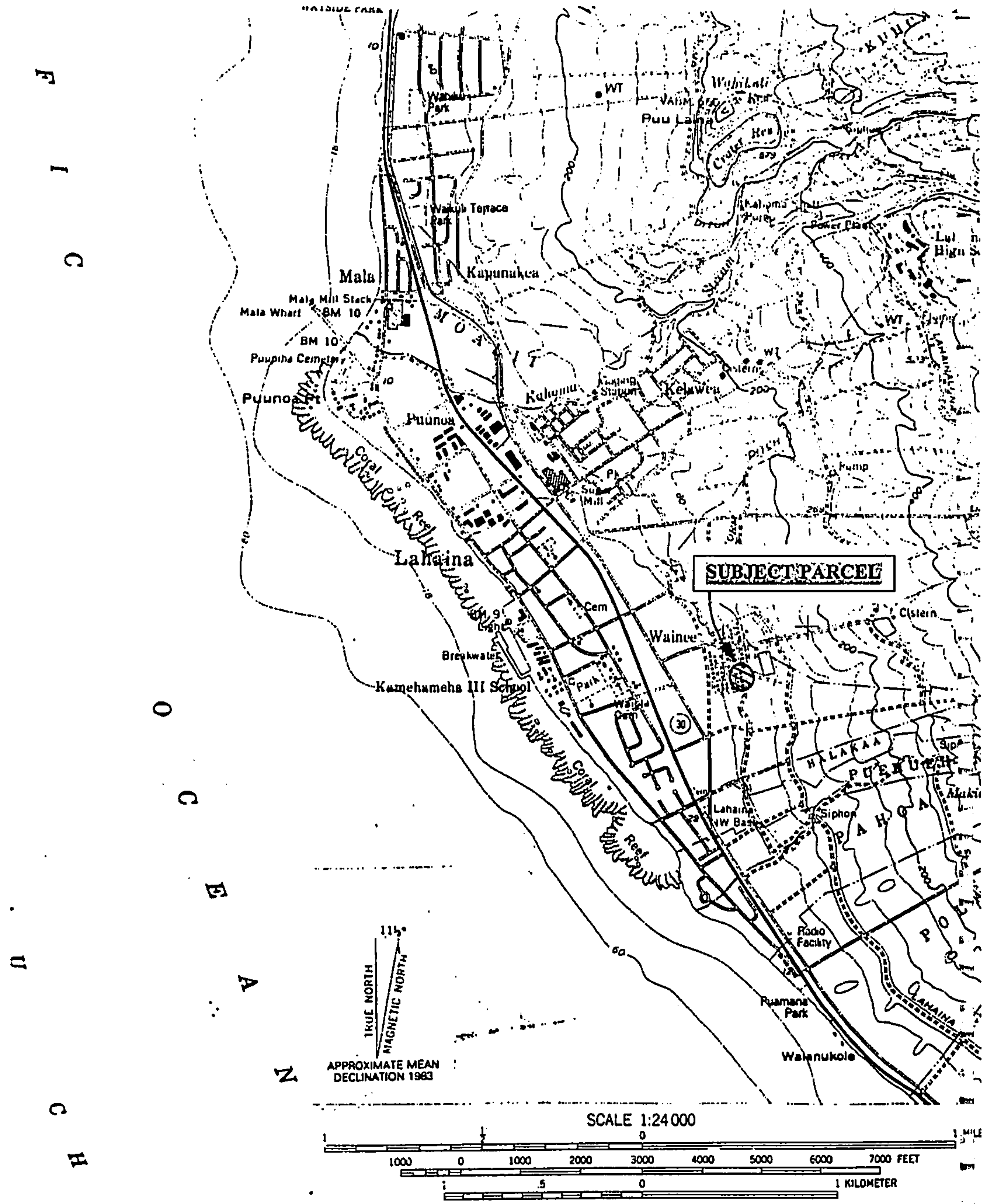
Mr. Charles Ridings
Ka Hale a Ke Ola Homeless Resource Center
Wailuku, Maui

Prepared by:

Xamanek Researches
Pukalani, Maui

Erik M. Fredericksen
Demaris L. Fredericksen

December 19, 2000



Map 1 – Topographic Map, U.S.G.S. Lahaina Quadrangle, 1983.