DRAFT ENVIRONMENTAL ASSESSMENT

WEST HAWAIʻI EMERGENCY HOUSING FACILITY

TMK (3rd) 7-4-010:020
Kailua-Kona, North Kona, Hawaiʻi Island, State of Hawaiʻi

January 2009

County of Hawaiʻi
Office of Housing and Community Development

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PROPOSING/APPROVING AGENCY:

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CLASS OF ACTION:

Use of County Land and Funds
Use of Federal Funds

This document is prepared pursuant to:

The Hawaiʻi Environmental Protection Act,
Chapter 343, Hawaiʻi Revised Statutes (HRS)

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SUMMARY

The West Hawai‘i Emergency Housing Facility is one facet of the County’s response to the increasing problem of homelessness in West Hawai‘i. The Office of Social Ministries currently operates for the County the Friendly Place, a one-stop center offering services to the homeless, including showers, laundry facilities and counseling. The proposed project would expand these services to construct a 31-bed dormitory style facility separated into female and male wings, with programs to aid single adult homeless males and females. The facility will include lockers, two bathrooms (male and female) with 3 toilets and 3 showers, a laundry facility, a kitchen, a common room, and a Resident Manager office.

The project would take place on a portion of a 2.025-acre County property on Pawai Place in Kailua’s Old Industrial Area, which formerly served as a wastewater treatment baseyard. The property is completely developed and urbanized, and surveys and consultation have determined that no significant archaeological, cultural or biological resources are present.

Phase I and Phase II Environmental Site Assessments were conducted for the entire property, a portion of which would be used for the proposed project. Several 55-gallon drums and a petroleum odor were detected in the Phase I ESA. The Phase II ESA determined that several recognized environmental conditions did exist. After investigation, it was recommended that no further investigation or remediation is needed for the portion of the property proposed for the emergency housing facility, under the assumption that other areas of the property would be cleaned up appropriately.

Minor construction impacts will occur. The contractor will implement a Storm Water Pollution Prevention Plan (SWPPP) to contain sediment and storm water runoff during construction. Sensitive receptors to noise exist and the contractor will be required to consult with the Department of Health, and, if appropriate, obtain a permit per Title 11, Chapter 46, HAR (Community Noise Control) prior to construction, which may include various mitigation measures. The Friendly Place would require temporary relocation to another property, probably in the Old Industrial Area, during construction.

Operationally, minor traffic and noise impacts from use and servicing the facility are expected. Coordination with several dozen business operators in the surrounding area has been conducted in order to identify problems associated with the use of the facility by the homeless and to develop structural and operational solutions to minimize these impacts.

PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED AND ENVIRONMENTAL ASSESSMENT PROCESS

1.1 Project Description and Location

The West Hawai‘i Emergency Housing Facility is one facet of the County’s response to the increasing problem of homelessness in West Hawai‘i. The Office of Social Ministries currently operates for the County “The Friendly Place” – a one-stop center offering services to the homeless, including showers, laundry facilities and counseling – on a 2.025-acre County of Hawai‘i property on Pawai Place in Kailua’s Old Industrial Area that formerly served as a wastewater treatment plant and baseyard (Figures 1-3). The proposed project would expand homeless services by building a 31-bed dormitory, separated into female and male wings, with programs to aid single adult homeless males and females (Figure 4). The facility will include lockers, two bathrooms (male and female) with 3 toilets and 3 showers, a laundry facility, a common room, a kitchen, and a Resident Manager office. Because of the special nature of the facility, a waiver from parking requirements will be sought from the Hawai‘i County Planning Department. A landscape plan will be developed during design and implemented at construction.

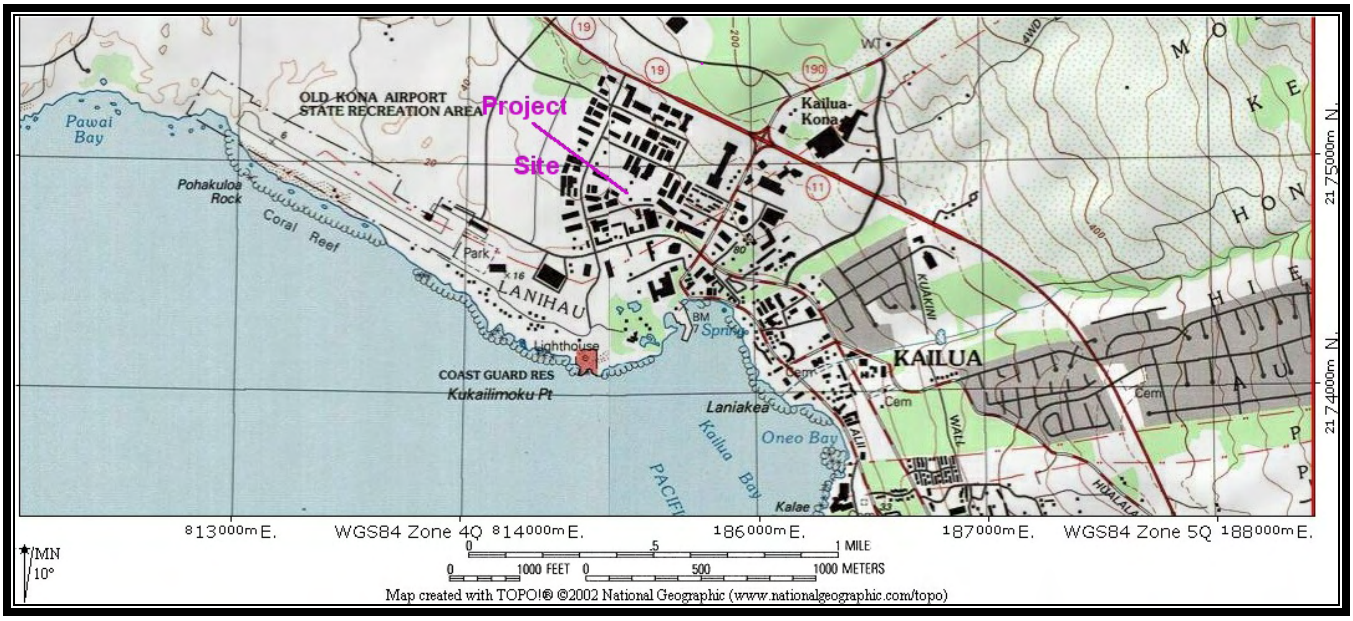

Figure 1. Project Location USGS Map

The County of Hawai‘i would subdivide the property (with the remainder continuing to be used by other County departments), build the emergency housing facility and then lease it to a service provider who would operate it as an emergency housing facility. Although operational details will be finalized by the service provider, it is expected that the facility would be staffed with two persons in the daytime, two during swing shift, and one during the midnight shift.

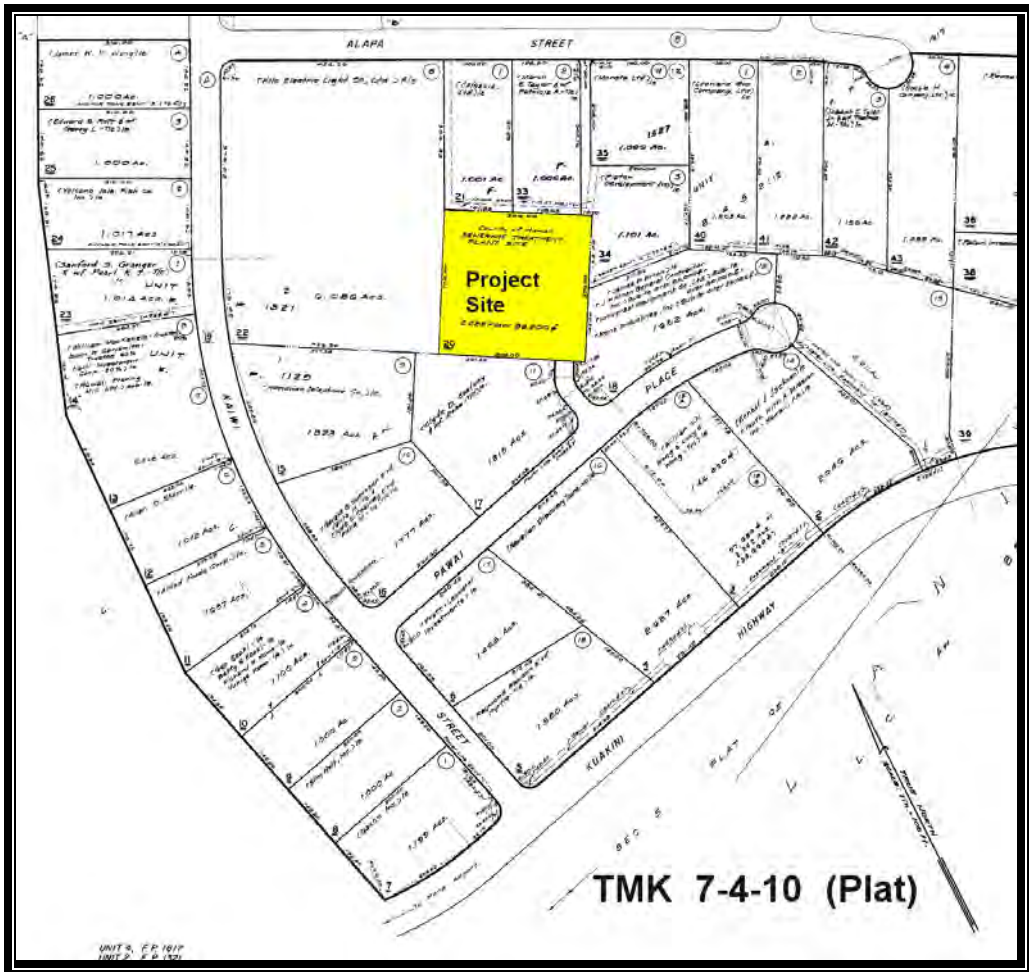

Figure 2. TMK Map

Figure 3a. The Friendly Place

Figure 3b. Portion of Site of Proposed Emergency Housing Facility

Figure 3c. Airphoto of Project Site (from Microsoft Virtual Earth ©)

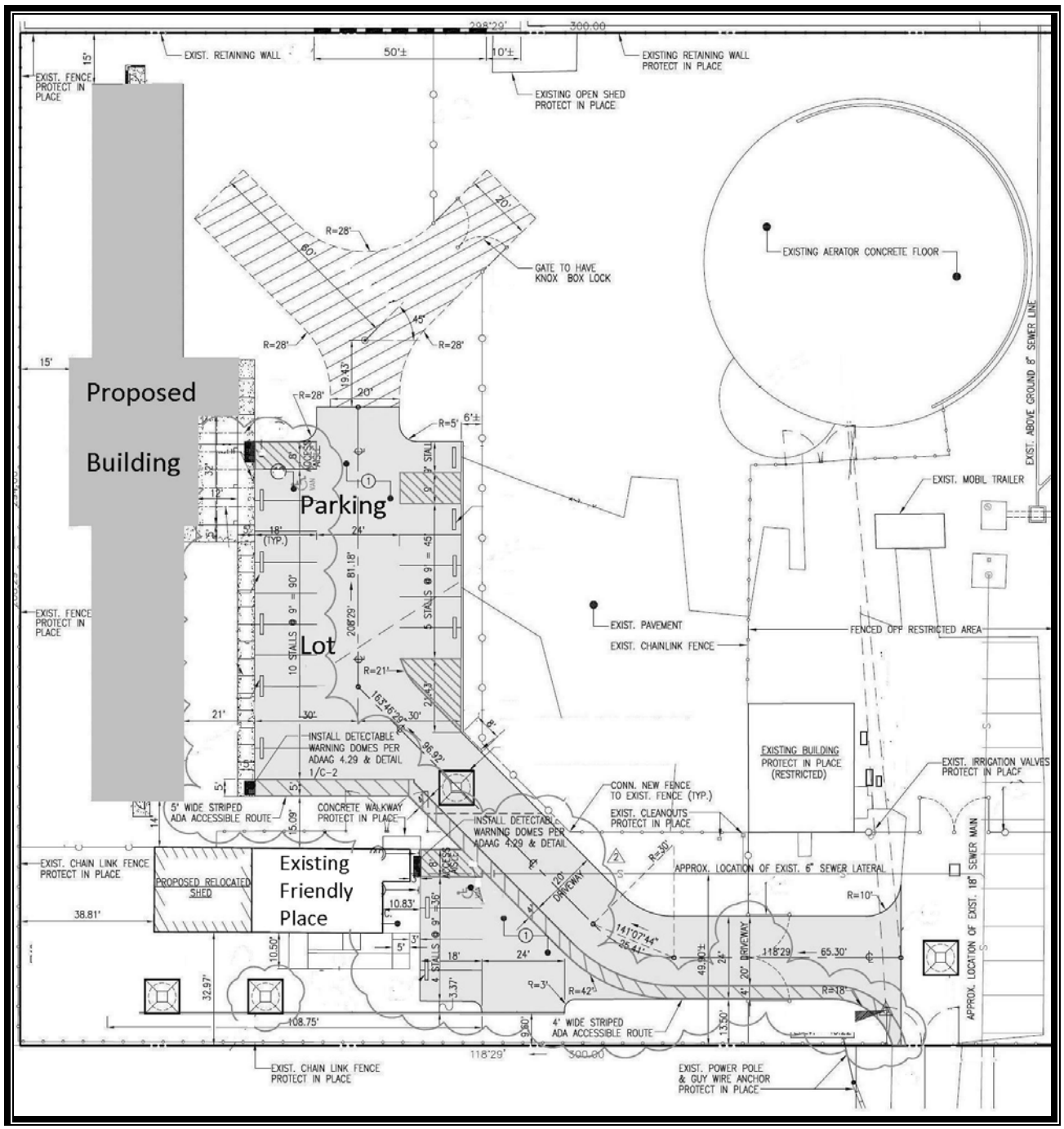

Figure 4a. Site Plan (Conceptual)

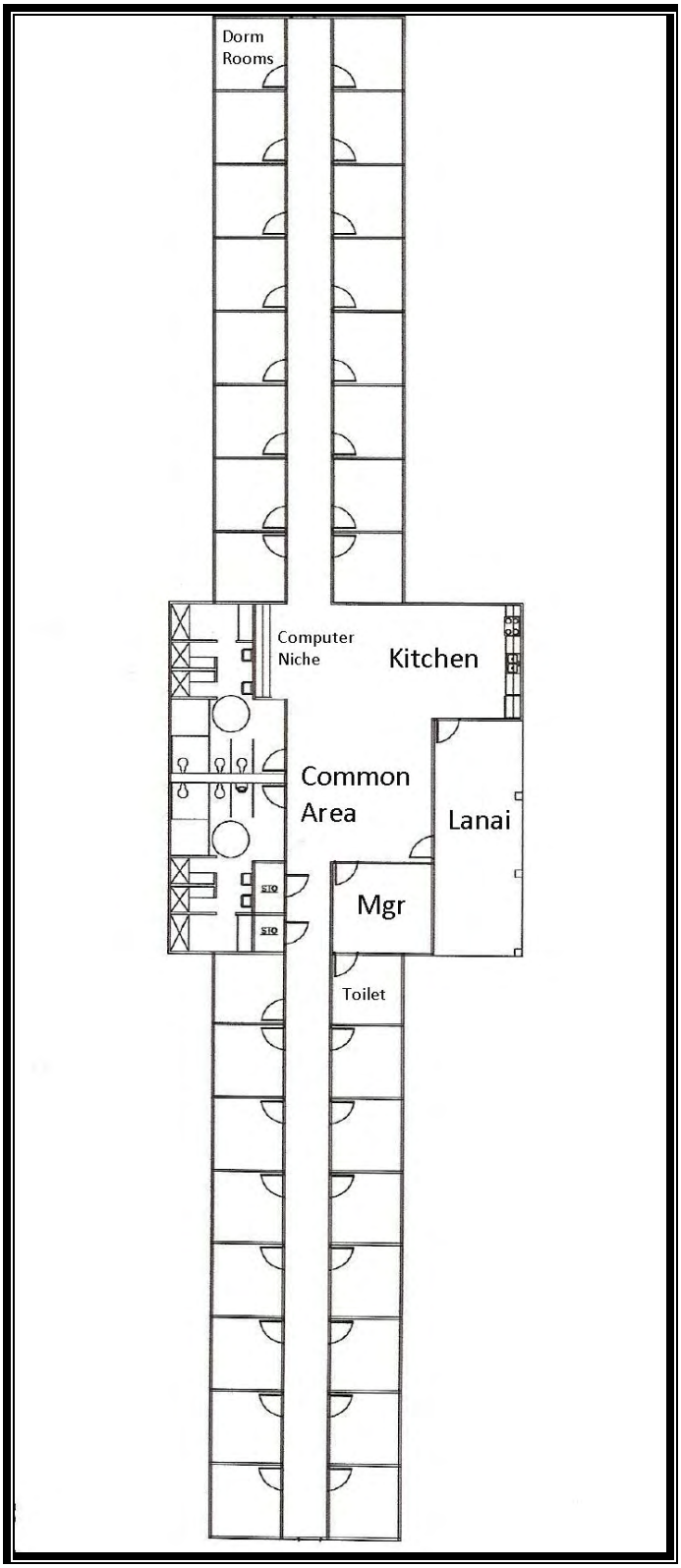

Figure 4b. Floor Plan (Conceptual)

The West Hawai‘i Emergency Housing Facility will not be a drop-in shelter. In order to be eligible, clients will be referred by a social service agency and then screened by the service provider at the drug- and alcohol-free facility. Clients will typically utilize the facility mostly from evening through early morning. A secure front gate will be locked for vehicles after curfew, with ingress and egress for clients allowed only as required by job schedules. The facility will be fully fenced and there will be a security camera system. The facility will be visited in the mornings by social service providers including a mental health case manager and various other health workers. Typically no more than two staff will be present, and as few clients own vehicles, traffic in and out of the facility will generally, be light, consisting of these workers, social service providers and maintenance companies.

The Emergency Housing Facility is envisioned as one part of a continuum of care from drop-in services to emergency housing to transitional housing to independent occupation of a residence. To be served, clients will have to be employed or actively seeking work. A variety of social service agencies will assist the clients, including Adult Mental Health, Care Hawai‘i Mental Health, and Family Support Services. Other agencies actively involved in assisting homeless individuals include the St. Michael’s Church, which works with HIV-positive individuals, Moku Ai Kaua Church, and the Neighborhood Place of Kona, which works with families. There will be no tolerance for drugs and alcohol, and clients will be tested for drugs randomly or with cause. Clients who abuse drugs will be referred to programs such as the Big Island Substance Abuse Council (BISAC) or the Bridge House, who are better equipped and situated to deal with these problems.

The construction budget for the project is about $1.8 million, which may be funded by County, State, federal and/or private agencies. The operational budget will be determined by the service provider, which, after obtaining a lease from the County, will be responsible for securing operating funds from sources such as HUD’s Emergency Shelter Grant (ESG) funds, the State’s Homeless Stipend Program, and the County’s Human Services Grant. In addition, providers also access funding through private sources such as the Harry & Jeanette Weinberg Foundation, United Way, etc. The project is currently expected to begin construction in 2009 to be operational sometime later in the year.

The Friendly Place – a one-stop center offering services to the homeless, including showers, laundry facilities and counseling – would require temporary relocation to another property, probably in the Old Industrial Area, during construction.

1.2 Purpose and Need

There are many misconceptions regarding the condition of homelessness in Hawai‘i. Table 1 provides some useful definitions. Several surveys of homelessness have been undertaken on the Big Island during the last two decades; two (SMS 2004 and FAQ Hawaii 2007) provide particularly pertinent information.

Table 1 Homelessness Definitions

Homeless
There is more than one definition of homelessness. Aspects of the official definition of homelessness for Hawai`i from Section 201G-451 of the Hawai`i Revised Statutes include:

Homeless means:
(1) An individual or family who lacks a fixed, regular, and adequate nighttime residence; and
(2) An individual or family who has a primary nighttime residence that is within a supervised publicly or privately operated shelter designed to provide temporary living accommodations; or in a public or private place not designed for or ordinarily used as sleeping accommodations for human beings.

Unsheltered Homeless
Persons or groups of persons having a primary nighttime residence that is a public or private place not designated for, or ordinarily used as, a regular sleeping accommodation for persons (including beaches, parks, automobiles, caves, benches, and abandoned or vacant buildings)

Sheltered Homeless
Persons or groups of persons who lack fixed, regular and adequate nighttime residence and stay at a supervised public or private shelter design to provide temporary alleviation of homelessness through the provision of living accommodations (emergency, transitional, or other) or that is an institution that provides temporary residence for individuals intended to be institutionalized.

Hidden Homeless
A person or group of persons who…
• share accommodations with other groups in the same household who without the generosity of the host family would be homeless.
• Are "doubled-up" (two or more families or groups or persons related by birth marriage or adoption).
• Are "sharing" (two or more families or groups or persons not related by birth marriage or adoption).
• Persons who depend upon public assistance for their shelter payments each month.

In 2003, a consortium of county and State agencies from around the State of Hawai'i commissioned a study of the homeless population (SMS 2004). The objective was to provide policy makers and service program managers with accurate information on the extent, characteristics, and causes of homelessness. Specific project tasks included determining the number and living conditions of the homeless population, estimating the number of homeless individuals who are not being served, and supplying information on the potential causes and effects of homelessness to improve policies and programs. The study incorporated an agency survey, expert interviews, a homeless database analysis, shelter count surveys, external fielding, and telephone interviews.

The study provided a wealth of information on the homeless of Hawai'i County. A key fact was the total of 1,243 homeless persons in the County of Hawai'i on any given day in August 2003. This represented an alarming increase from earlier estimates, although a lack of appropriate data complicated comparison. Other important findings included the following:

- Only about 239 individuals, or 12 percent of this homeless population, were in some kind of shelter, apparently because of a lack of supply rather than low demand for shelter space. In July of 2003, the County had nine functioning shelters with a combined capacity of 193 persons per night. Transitional shelters housed 110 homeless persons and emergency shelters housed 139 at the time of the count.
- Locations where unsheltered homeless slept included tents, garages, caves, outside, and in vehicles, among which they often tended to rotate.
- About 16 of those interviewed said they were employed – 50 percent full-time and 23 percent part-time. About 12 percent said they were occasionally employed. They reported that disability, health problems and not being able to find work made employment difficult.
- Just over half (56 percent) of all interviewed homeless persons reported being of Hawaiian or part-Hawaiian ancestry, with 43 percent stating that they were 50 percent or more Hawaiian. Of this latter group, more than half said they were on the waiting list for a Hawaiian Home Lands homestead award, while about a quarter had once been a lessee.
- About 41 percent of the unsheltered homeless suffered from mental illness. Some 40 percent had a physical illness, and 36 percent suffered from both. About 18 percent self-reported substance abuse.
- Almost half of homeless people were homeless as members of a family, although most homeless families have only adult members. Persons in families with children make up about one quarter of all homeless, about 14% of the homeless were children.
- The most commonly cited reason for homelessness was a problem paying rent. Unemployment, substance abuse, release from prison, and family conflicts were also frequently mentioned.

Another less comprehensive Point-In-Time-Count was conducted on January 31, 2007 (FAQ Hawai‘i 2007). This count estimated a total of 1,108 homeless persons on the Big Island, fewer than in 2003, probably because of the omission of several shelters (J. McComber, County OHCD pers. comm.), although SMS (2007) also reported that homeless populations tend to increase in the summer. The urban Kailua-Kona area had an estimated 67 homeless individuals at the time of the count. No emergency housing for the homeless is available in West Hawai‘i, although there are various programs that assist families.

A significant finding was that there was an increase of 25 percent in the “unsheltered chronically homeless” population. A chronically homeless person is defined as an unaccompanied homeless individual with a disabling condition who has either been continuously homeless for a year or more or has had at least four episodes for homelessness in the past three years.

The County of Hawai‘i has been collaborating with various State agencies and particularly with private non-profits to alleviate the homelessness problem. Assembled in order to quality for funding from the U.S. Department of Housing and Urban Development (HUD), the Hawai‘i Island Community Alliance Partners (CAP) represents the official planning group on homelessness in Hawai‘i County. The mission of the CAP is to assist individuals and families who become homeless or are at-risk of becoming to regain their housing stability and a greater quality of life.

For construction of facilities such as the Friendly Place and the proposed West Hawai‘i Emergency Housing Facility, the County's Office of Housing and Community Development assumes the central role of applying for funding, securing the land, and issuing construction contracts. To operate these facilities, the County typically seeks service providers to operate the programs under a multi-year lease to provide community outreach. In this model, the non-profit is also responsible for maintenance, repair and liability. Service providers typically receive money from County, State and federal grants, the United Way, churches, and private donations.

1.3 Environmental Assessment Process

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai‘i Revised Statutes (HRS). This law, along with its implementing regulations, Title 11, Chapter 200, of the Hawai‘i Administrative Rules (HAR), is the basis for the environmental impact process in the State of Hawai‘i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. Part 4 of this document states the anticipated finding that no significant impacts are expected to occur; Part 5 lists each criterion and presents the findings for each made by the County of Hawai‘i, Office of Housing and Community Development (OHCD), the proposing agency.

Separately, environmental documentation in conformance with the National Environmental Policy Act (NEPA) and the implementing regulations of the U.S. Department of Housing and Urban Development (HUD) for NEPA, at 24 CFR Part 58, is also being undertaken. A HUD Environmental Review record under HUD's Community Development Block Grant Program (CDBG) has been prepared along with a NEPA Environmental Assessment.

1.4 Public Involvement and Agency Coordination

The following agencies and organizations were consulted in development of this document.

Federal:
- U.S. Fish and Wildlife Service
- U.S. Army Corps of Engineers

State:
- Department of Land and Natural Resources, Historic Preservation Division
- Office of Hawaiian Affairs, Honolulu and West Hawai‘i Offices
- Department of Health

County:
- Planning Department
- Public Works Department
- Police Department
- County Council

Private:

Kona Hawaiian Civic Club
Kona-Kohala Chamber of Commerce

Copies of a communications received during early consultation are contained in Appendix 1a.

A special subgroup of the CAP, the West Hawai‘i Advisory Committee, was formed in November 2006 to outreach to the community and businesses surrounding the Friendly Place homeless service center. The goal has been to provide an ongoing forum that can identify and address issues and concerns so that businesses and the Friendly Place and emergency housing can co-exist in harmony. The committee created a brochure about the Friendly Place printed with funds provided by Catholic Charities. The brochure was given to businesses during in-person canvassing or as part of a mail-out survey. Appendix 1b is a summary of the survey results, which are discussed in Section 3.2.1 of the EA. The West Hawai‘i Advisory Committee is committed to continuing to meet with local businesses as needed to address concerns.

PART 2: ALTERNATIVES

2.1 No Action

Under the No Action Alternative, the facility would not be constructed, and the many dozens of homeless individuals in West Hawai‘i would continue to lack emergency housing and the services that could assist some of them to transition back to a better life. Service providers emphasize the importance of emergency housing in breaking the downward spiral of street life, substance abuse, and mental health problems. Because homelessness is an acute problem in West Hawai‘i, the Office of Housing and Community Development considers the No Action Alternative highly undesirable.

2.2 Alternative Locations

The Community Alliance Partners (CAP) has been investigating sites in the Kailua-Kona area for many years. The use requires a location close to urban centers because of the clients’ need to walk to jobs, medical offices and social service facilities. The facility is considered an undesirable land use by most neighbors, and proposals to develop facilities near residential neighborhoods, schools, parks, or resorts are often vigorously opposed. The location within a designated mixed industrial and commercial zone, while not ideal, avoids some of these problems. The Community Alliance Partners group recognizes that the facility will have some impact on neighboring businesses and pledges to continue to work to minimize these impacts, but in all its searching has not been able to identify a more suitable site that is available for use.

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Basic Geographic Setting

The property upon which the West Hawai‘i Emergency Housing Facility would be constructed is referred to in this EA as the *project site*. The term *project area* is used to describe the general environs of the Old Industrial Area in Kailua-Kona and surrounding areas.

The project site is located at about 45 feet in elevation on Pawai Place in the Old Industrial Area of Kailua-Kona (see Figs. 1-2). The area has been completely urbanized, as shown in Figure 3. The climate is warm and dry, with an average maximum daily temperature of 87 degrees Fahrenheit (F) in September, the hottest month, and 83 degrees F in February, the coolest month. Corresponding average minimum daily temperatures are 73 and 66 degrees F, respectively. The average rainfall is approximately 40 inches (U.H. Hilo-Geography 1998:57) http://www.weather.com/weather/wxclimatology/monthly/graph/USHI0033).

3.1 Physical Environment

3.1.1 Geology, Soils and Geologic Hazards

Environmental Setting

The surface of the project site is paved and developed, but the substrate beneath this is lava from Hualalai Volcano dated 1,500 to 3,000 years before the present (Wolfe and Morris 1996). The project site soil is classified by the Natural Resources Conservation Service (formerly Soil Conservation Service) as Lava Flows, Pahoehoe, which actually designates a substrate where soil has not had time to develop. In general, this substrate is permeable, with slow runoff and slight hazard of erosion (U.S. Soil Conservation Service 1973).

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. The United States Geological Survey (USGS) classifies all of Kailua-Kona, which is on the slopes of the dormant volcano Hualalai, as Lava Flow Hazard Zone 4, on a scale of ascending risk 9 to 1 (Heliker 1990:23).

In terms of seismic risk, the entire Island of Hawai‘i is rated Zone 4 Seismic Hazard (*Uniform Building Code, 1997 Edition*, Figure 16-2). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built. On Sunday October 15, 2006, two damaging earthquakes struck the west side of Hawai‘i Island of magnitude 6.7 and 6.0. These earthquakes caused no damage to the project site.

Impacts and Mitigation Measures

The project site is susceptible to lava flow and seismic hazard. However, as much of the island

has similar hazard levels, geologic hazards impose no particular constraints on the proposed action, and the proposed facilities are not imprudent to construct. Project design takes soil properties into account. All facilities will be built in conformance with the Uniform Building Code's seismic standards.

3.1.2 Drainage, Water Features and Water Quality

Existing Environment

Owing to the recent geology and dry climate, the project area has few fresh surface water bodies such as lakes, ponds, or streams. The project site is separated from coastal waters at Kailua-Kona harbor by 2,000 feet of industrial and/or resort development. The site is not located within a floodplain, and is classified on Flood Insurance Rate Maps as within Zone X, outside of the 500-year flood plain. No waters of the U.S., including streams, pools, springs, or wetlands, are present.

Impacts and Mitigation Measure

Because of the limited scale of construction and the environmental setting, the risks for flooding or impacts to water quality are negligible. No impacts to stream, wetlands, or any other waters of the U.S., will occur, as none are present.

In order to minimize the potential for sedimentation and erosion, the contractor shall perform all earthwork and grading in conformance with Chapter 10, Erosion and Sediment Control, Hawai'i County Code. The contractor will prepare a Storm Water Pollution Prevention Plan (SWPPP). In order to properly manage storm water runoff, the SWPPP will describe the emplacement of a number of best management practices (BMPs) for the project. These BMPs may include, but will not be limited to, the following:

- Minimization of soil loss and erosion by revegetation and stabilization of slopes and disturbed areas of soil, possibly using hydromulch, geotextiles, or binding substances, as soon as possible after working;
- Minimization of sediment loss by emplacement of structural controls possibly including silt fences, gravel bags, sediment ponds, check dams, and other barriers in order to retard and prevent the loss of sediment from the site;
- Minimizing disturbance of soil during periods of heavy rain;
- Phasing of the project to disturb the minimum area of soil at a particular time;
- Application of protective covers to soil and material stockpiles;
- Construction and use of a stabilized construction vehicle entrance, with designated vehicle wash area that discharges to a sediment pond;
- Washing of vehicles in the designated wash area before they egress the project site;
- Use of drip pans beneath vehicles not in use in order to trap vehicle fluids;

- Routine maintenance of BMPs by adequately trained personnel;
- Coordination of storm water BMPs and wind erosion BMPs whenever possible; and
- Cleanup and disposal at an approved site of significant leaks or spills, if they occur.

3.1.3 Flora, Fauna and Ecosystems

Existing Environment

The area is completely urbanized and developed. Most vegetation on the project site and adjacent areas is either landscaped ornamentals or weeds (see Figure 3b). The most common weeds include lion's ear (*Leonotis nepetifolia*), *Bidens alba*, garden spurge (*Chamaesyce hirta*), *Hyptis pectinata*, and hairy abutilon (*Abutilon grandifolium*). A very common native plant that inhabits disturbed areas, ʻuhaloa (*Waltheria indica*) is also present. A native coastal shrub, naupaka (*Scaevola sericea*) has been planted for landscaping. Several kiawe (*Prosopis pallida*), monkeypod (*Samanea saman*), and opiuma (*Pithecellobium dulce*) trees, all introduced trees, are also present. No habitat for native animal species is present. In terms of conservation value, no biological resources requiring special protection are present.

In response to early consultation, the U.S. Fish and Wildlife Service stated that to the best of its knowledge, no listed or proposed threatened or endangered species, or designated or proposed critical habitat, are present (see letter of July 6, 2007, App. 1a). The agency also stated that it had determined that the project, as proposed, will not result in the take of any listed species or adverse modification of any critical habitat.

Impacts and Mitigation Measures

Because of the lack of native ecosystems, or threatened or endangered plant species, no adverse impacts to biological resources would occur as a result of construction and occupation of the site.

3.1.4 Air Quality, Noise, and Scenic Resources

Environmental Setting

Air pollution in Kona is mainly derived from volcanic emissions of sulfur dioxide, which convert into particulate sulfate and produce a volcanic haze (vog) that persistently blankets the district. Drier areas experience blowing dust, especially adjacent to construction sites during occasional episodes of high wind. On the project site, operation of retail and light industrial businesses may produce vehicle and equipment exhaust.

Adjacent retail and light industrial uses in the project area also produce medium to occasionally high levels of noise during the daytime on the project site, which decrease to low levels at night.

The general project area, including the project site, is commercial and industrial and does not exhibit scenic resources or viewplanes considered significant for their scenic character in the Hawai‘i County General Plan.

Impacts and Mitigation Measures

Development would entail limited excavation, grading, compressors, vehicle and equipment engine operation, and construction of new infrastructure. These activities may generate noise exceeding 95 decibels at times, impacting nearby sensitive noise receptors. In cases where construction noise is expected to exceed the Department of Health's (DOH) "maximum permissible" property-line noise levels, contractors would obtain a permit per Title 11, Chapter 46, HAR (Community Noise Control) prior to construction. DOH would review the proposed activity, location, equipment, project purpose, and timetable in order to decide upon conditions and mitigation measures, such as restriction of equipment type, maintenance requirements, restricted hours, and portable noise barriers.

The facility will not produce emissions, and there are no indications of air quality violations that would make the area unacceptable for its proposed use.

No important viewplanes or scenic sites recognized in the Hawai‘i County General Plan would be affected, and the project would involve essentially no scenic impacts.

3.1.5 Hazardous Substances, Toxic Waste and Hazardous Conditions

A Phase I Environmental Site Assessment (ESA) was performed on the entire property by Myounghee Noh & Associates (MNA). Because evidence of contamination by petroleum was found on the property (although not in the area of the proposed emergency housing facility), a Phase II ESA was also performed. The reports are summarized below and contained in full in Appendices 2a and 2b.

A Phase I Environmental Site Assessment aims to identify *recognized environmental conditions* that exist on the project site, and existing *recognized environmental conditions* in the project area that have the potential to impact the subject property. The term *recognized environmental conditions* means the presence or likely presence of any hazardous substances or petroleum products on the property under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the property or into the ground, groundwater, or surface water of the property (American Society for Testing and Materials [ASTM], 2000).

In a Phase I Environmental Site Assessment, evidence of *recognized environmental conditions* may be obtained by execution of the following:

- A records search of federal and State databases of hazardous material use, storage, and releases, including, but not limited to, hazardous material generators, leaking underground storage tanks, and reported hazardous material releases;

- Interviews with landowners, nearby residents, and regulatory agency members concerning the subject property's history of land use;
- Other records searches, including tax records, aerial photography, and, when available, fire insurance maps; and
- A visual survey of the property and immediately surrounding areas.

Phase I ESA Findings

Database Search for Subject and Adjacent Properties

The project site and adjacent properties were not listed in the federal and State databases covered by Environmental Data Resources The findings of this records search are summarized in Table 2, below.

Table 2
Findings of Records Search, Phase I ESA

Search Type	**Distance Searched**	**Findings**
Federal NPL Site List 1	1 mile	None
Federal RCRA CORRACTS TSD Facilities List	1 mile	None
State Hazardous Waste Sites	1 mile	5
Federal CERCLIS List	½ mile	None
Federal RCRA Non-CORRACTS TSD Facilities List	½ mile	None
State-Equivalent CERCLIS	½ mile	None
State Landfill and/or Solid Waste Disposal Site List	½ mile	None
State Leaking UST List	½ mile	9
Federal RCRA Generators List	½ mile	5
State Registered UST List	¼ mile	11
Federal ERNS List	Subject Site	None
State Spill List	Subject Site	None

See Appendix 2 for explanation of databases

It was MNA's opinion that the above sites do not pose a significant threat to the subject site. This opinion is based on distance (the listed sites are too far away to pose potential migration threats) and the State of Hawai'i Department of Health records on LUST.

However, during a site check and sampling conducted on May 13, 2007, MNA observed the subject site and surrounding areas. Much of the 2.025-acre site, which formerly had a sewage treatment plant and is currently used as a County baseyard, was partially paved and construction waste was present throughout. On the north side of the property (not the portion proposed for the

emergency housing) were several 55-gallon drums containing used oil. The drums were in poor condition; however, MNA did not find evidence of leaks onto the soil. In the northeast corner of the subject site a petroleum odor was evident. MNA was not able to determine the source of the odor based on the visual assessment. There was a potential for a used oil release onto the soil due to the poor drum conditions, and it appeared that the stored oil might need to be pumped out prior to moving or disposing of the drums.

Phase II ESA Findings

Accordingly, additional research was done, and the subsequent Phase II ESA was devised to confirm the presence or absence of any *recognized environmental conditions* at the subject property, with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products. Additionally, the purpose of this Phase II ESA was to identify potential risks from environmental contaminants to construction workers and occupants of the planned emergency housing facility on a separate portion of the property.

MNA focused this Phase II ESA on the west half of the property where the proposed redevelopment was to take place, but did address both recognized environmental conditions identified in the Phase I ESA, even though the shed drum storage area was not part of the planned redevelopment (see Figure 5). Systematic surface multi-increment samples (MIS) were collected and analyzed within four Decision Units (DUs) for total petroleum hydrocarbons as diesel (TPH-D), TPH as oil (TPH-O), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and Resource Conservation and Recovery Act (RCRA) metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. One subsurface grab sample was collected from 16 to 24 inches below ground surface from each DU and analyzed for the same analytes as the MIS samples plus volatile organic compounds (VOCs)

During subsurface sampling in DU A, petroleum odor was present from spoil and sample material. In DU B, two one-foot diameter pools of petroleum product were visible. This area was excluded from the DU with increments collected from the remaining area. Portions of DU D were covered with asphalt paving. Increments from DU D were collected from areas with exposed surface soil.

The analytical results of sample analysis were compared against the Environmental Action Level (EAL) for soil with unrestricted land use above a non-drinking water resource and greater than 150 meters from surface water, and the available quality control data (QC). VOCs or SVOCs were not detected in any of the samples. Arsenic, barium, cadmium, chromium, lead, and selenium were either detected at concentrations well below the EAL or were not detected. Results for mercury were predominantly an order of magnitude below the EAL but also had a high Relative Standard Deviation (RSD) within the triplicate samples. Silver was found to be above the EAL in DU B, which was not anticipated based on the Phase I ESA. TPH-O was above the EAL in DU A and B

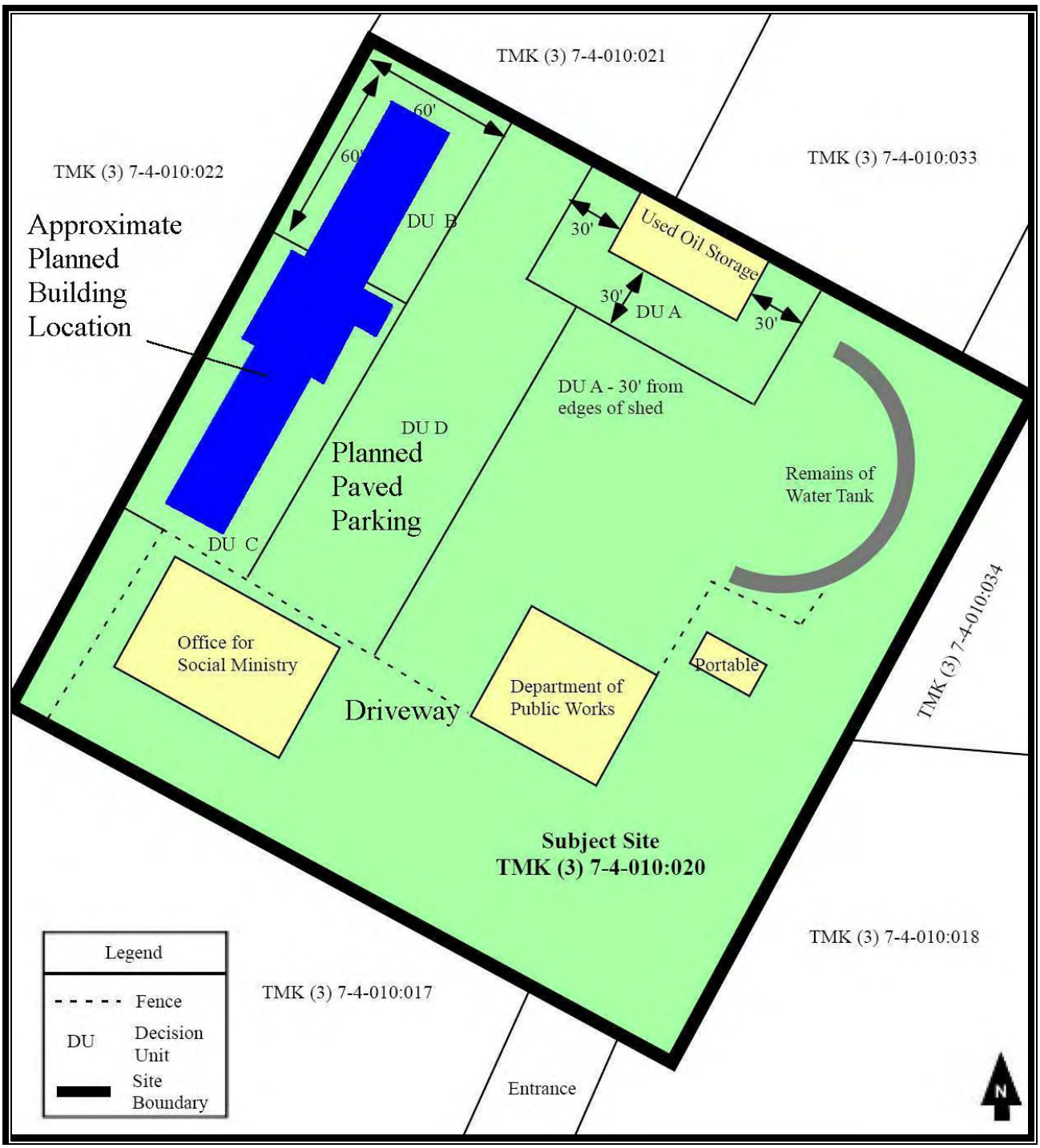

Figure 5 Phase II ESA Decision Units

and is likely close to or slightly above the EAL in DU C and D based on the QC data. PCBs did not exceed the EAL in any of the MIS samples. However, variability in the QC samples suggested that at least in DU B the average concentration was near the EAL.

The conclusion of the Phase II ESA was that *recognized environmental conditions* did exist within the investigation area with respect to the selected EAL, including free product petroleum, silver in surface soil, and TPH-O in surface soil.

It is recommended that no further investigation or remediation is needed for the western portion of the property, the area planned for the facility, and that the emergency housing facility can proceed as planned with concurrence from the Hawai‘i State Department of Health, which has been supplied a copy of the Phase II ESA as well as this EA for comment. This recommendation is made based on the following observations and conditions:

- The free petroleum product observed in DU B will be cleaned up.
- Any further investigation or clean-up of the TPH in DU A soil can continue and will not be hindered by the redevelopment plan for the western half of the property.
- Silver and mercury concentrations are anomalous to the conceptual site model and are possibly an artifact of laboratory error. In the context of the site they do not pose a risk.
- Grading and vegetation of areas will aerate the soil and increase biological activity, accelerating natural attenuation of TPH.
- TPH-O does not pose a vapor intrusion concern to the proposed building.
- Redevelopment of the site will reduce exposure to contaminants by placing a building and paved parking area over much of the site.

3.2 Socioeconomic and Cultural

3.2.1 Socioeconomic Characteristics

The project would affect and benefit Kailua-Kona and, more generally, West Hawai‘i. Many parts of Kona have experienced high rates of growth associated with the booming visitor industry in West Hawai‘i. Since 1970, population has grown rapidly in all of West Hawai‘i and particularly in the North Kona District, where the number of inhabitants increased from 4,832 in 1970 to 28,543 in 2000 (U.S. Census of Population 2000). Table 3 provides information on the socioeconomic characteristics of Kailua-Kona along with those of Hawai‘i County as a whole for comparison, from the United States 2000 census.

In general, the population growth in North Kona has been dominated by those born outside the district, County and even the State. The ethnic makeup is similar to that of the State of Hawai‘i as a whole, but with a much larger proportion of whites, which continues to grow. North Kona residents on the average are also slightly younger, better educated, and less prone to have a disability. On average, incomes in North Kona are greater and the incidence of poverty is proportionately less. But home values and rents are greater too, despite the higher vacancy rate,

which mainly reflects second homes for wealthy mainlanders. As with the rest of the County, poverty is highest among Native Hawaiians – almost double that of whites. As discussed in Section 1.2, over half of all interviewed homeless persons reported being of Hawaiian or part-Hawaiian ancestry, with 43 percent stating that they were 50 percent or more Hawaiian.

Table 3
Selected Socioeconomic Characteristics

Characteristic	Hawai'i County	North Kona	Characteristic	Hawai'i County	North Kona
Total Population	148,677	28,543	21 to 65 Years, Disabled (%)	19.2	17.4
Median Age	38.6	39.4	Employed and Disabled, 21 to 65 Years, (%)	51.8	64.1
Older Than 65 Years (%)	13.5	11.8	65 Years of Older, Disabled (%)	40.3	38.1
Race (%)			Employment in:		
White	31.5	47.1	Management	30.2	26.6
Asian	26.7	16.3	Service	22.2	24.3
Hawaiian	9.7	8.9	Sales	25.1	27.8
Other Pacific Islander	1.5	1.8	Office	3.8	2.2
Two or More Races	28.4	23.5	Farming, Fishing and Forestry	9.9	10.4
Hispanic (Any Race)	9.5	7.9	Production, Transportation	8.9	8.8
Family Households (%)	69.6	68.6	Families Below Poverty Line (%)	11.0	5.6
Households with Female Householder, no Husband, With Children (%)	7.7	6.7	Households with Female Householder, no Husband, With Children, Below Poverty Line (%)	28.1	17.5
Householder Lives Alone (%)	23.1	20.1	Individuals Below Poverty Line (%)	15.7	9.7
Average Household Size	2.75	2.70	Over 65 Below Poverty Line	7.2	5.3
Average Family Size	3.24	3.13	Median Household Income ($)	39,805	47,610
Over 25 Years Old With High School Diploma (%)	84.6	87.7	Housing Owner-Occupied (%)	64.5	58.5
Married Now (%)	52.0	53.9	Housing Rented (%)	34.5	41.5
Widowed (%)	6.3	4.9	Housing Vacant (%)	15.5	19.7
Divorced Now (%)	10.7	11.4	Median Home Value, 1999 ($)	153,700	233,900
Veterans (%)	14.5	14.8	Median Rent, 1999 ($)	645	745
Over 16 in Labor Market (%)	61.7	69.2	Rent is Greater Than 25% of Income (%)	46.0	47.2
Residence 5 Years Ago (%)			Poverty by Race:		
Same Home	57.7	49.9	White	14.5	8.8
Different Home, Same County	26.5	28.8	Asian	7.3	6.2
Different County in Hawai`i	4.8	3.5	Native Hawaiian/Pacific Islander	26.4	15.8
Different State/Country	11.0	17.8	Two or More Races	20.4	10.3

Source: U.S. Bureau of the Census, May 2001. *Profiles of General Demographic Characteristics, 2000 Census of Population and Housing, Hawai'i.* (U.S. Census Bureau Web Page).

Many of these factors bear on homelessness. Kailua-Kona is an economically vibrant area attracting outsiders who, in general, have high incomes, drive up home values and create a very competitive rental market. Kona lacked even one stoplight as recently as 1975, but today in many ways it resembles a highly urbanized Orange County suburb. Many individuals within the ever-

dwindling proportion of the population with the deepest roots in the community – Native Hawaiians – draw considerable benefit from this economy. Some, however, end up feeling displaced and disoriented as traditional landscapes, customs, support systems and common values gradually disappear. In addition, many homeless individuals in Kona are from elsewhere, drawn to the area by its laid-back atmosphere and sunny weather, which may appear preferable to rainy Hilo or crowded Honolulu.

Impacts

The 31-bed emergency housing facility for the homeless and its associated services will be a social benefit for the homeless population, an especially significant one given the lack of emergency housing for the general homeless population.

At the same time, there will be impacts on local businesses. The meetings and surveys that the West Hawai‘i Advisory Committee has conducted as part of its outreach to community and businesses surrounding the Friendly Place has identified these issues and concerns (see Appendix 1b for full summary):

- **Safety/Security**: breaking motion lights, windows knocked out, fires, someone in dumpster, sleeping on property, parking in business area, fear and anxiety about personal safety, theft, burglary, and fire.
- **Worrisome/Offensive Behaviors**: emotional outbursts, trespassing, compulsive harmful or offensive behavior.
- **Business Facility**: dumping trash, use of water, damaged facilities, urine smell, sleeping on property, messy bathrooms.

Notwithstanding these serious concerns, the West Hawai‘i Advisory Committee observed that support for the Friendly Place and the proposed emergency housing facility appears to outweigh opposition among local businesses operators. Most of them recognize the extreme need for the facility as an integral step in the treatment of mental illness/substance abuse, job placement and readiness training, and the reintegration into the general population. Most business operators already express a compassion for their community through volunteer work and charitable donations, including homeless charities. Several have even experienced homelessness personally or through their loved ones.

The West Hawai‘i Advisory Committee concluded that with proper partnership and management, the Friendly Place and the West Hawai‘i Emergency Housing Facility can successfully coexist with the other businesses in the area. Key to the success will be ongoing communication and dialogue, security, accountability and maintenance of strict standards. The Advisory Committee continues to meet monthly. It will be the responsibility of the County, the CAP, and the selected social service provider to fulfill these commitments.

3.2.2 Archaeological and Cultural Resources

Existing Environment

The project site is located in a developed industrial subdivision that is part of the ahupua‘a of Keahuolu, in the district of Kona ‘akau (North Kona). Kona became a residence of many of the ali‘i (chiefs) of the Island of Hawai‘i beginning with Umi-a-liloa, who unified the island circa 1525. By this time, the island was divided into six districts or moku-o-loko (Fornander 1973 – Vol. II: 100-102). On Hawai‘i Island, the district of Kona is one of six major moku-o-loko within the island. Kona, like other large districts on Hawai‘i, was further divided into `okana or kalana (regions of land smaller than the moku-o-loko, yet comprising a number of smaller units of land), including that of Kona ‘akau, which extended from Lanihau to Pu‘uohau, and included Keahuolu.

Like Umi-a-liloa centuries before upon unification of Hawai‘i, Kamehameha I also moved his court to Kona after unification of all the islands to Kamakahonu in the ahupua‘a of Lanihau (present-day Kailua-Kona), directly adjacent to Keahuolu. Here Kamehameha spent the last years of his life and died in 1819 (Menton 1994: pp. xv-xvii).

Soon after Kamehameha I’s death, Kamakahonu was yet again the site of historic events, when Kamehameha II (Liholiho) ended the kapu forbidding women and men to eat together, thereby precipitating the end of the ancient religion with its kapu system. Later on in the year 1820 Kamehameha II and his entourage, including a number of American Protestant missionaries, departed for O‘ahu, where the Kingdom’s government was relocated. John Adams Kuakini created a fort out of the Ahu‘ena Heiau at Kamakahonu, where governance of the island continued under his charge.

Major changes in the area were brought about by the introduction of new forms of agriculture, which were of limited success, and by the Great Mahele in 1848, whereby Kamehameha III and his chiefs redistributed land ownership (Kelly 1983: pp. 22, 35-36). Over 800 kuleana property awards to native Hawaiians were made in Kona at this time and many other thousands of acres of Kingdom lands were sold to both Hawaiians and foreigners. The ahupua‘a of Lanihau 1, including the entire area of the old Kona airport, was awarded to William C. Lunalilo at this time, while eight other native Hawaiian claimants were awarded a total of 15.86 acres in this land division. Much of the royal lands of the 3,980-acre Keahuolu ahupua‘a are still part of the holdings of the charitable Queen Lili‘uokalani Trust, which is dedicated to the welfare of orphaned and half-orphaned Hawaiian children. The Queen Lili‘uokalani Children’s Center is a social service agency whose goals include nurturing ‘ohana, achieving educational success, perpetuating Hawaiian culture, developing leadership skills and supporting the basic needs of Hawaiian children. Income from the development of industrial subdivisions has played a key role in serving the mission of the trust.

The project site was completely transformed through mass grading and the development of an industrial subdivision (see Figure 3) and is now completely urbanized. No

resources or practices of a potential traditional cultural nature (i.e., landform, vegetation, etc.) appear to be present on or near the project site, and there is no evidence of any traditional gathering uses or other cultural practices.

Impacts and Mitigation Measures

As part of the current study, an effort was made to obtain information about any potential traditional cultural properties and associated practices that might be present in the area or affected by the proposed project. In particular, in conformance with Section 106 of the National Historic Preservation Act letter consultation was undertaken with the Office of Hawaiian Affairs (OHA) (Honolulu and West Hawai‘i offices), the State Historic Preservation Division, and the Kona Hawaiian Civic Club (see Appendix 1a for letters). OHA-Honolulu responded but did not have any specific comments related to cultural properties or practices. No groups or agencies provided any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating current use of the area for traditional and customary practices.

As no resources or practices of a potential traditional cultural nature appear to be present on or near the completely developed project site, the proposed construction and operation would not appear to impact any culturally valued resources or cultural practices.

As stated above, the State Historic Preservation Officer (SHPO) was contacted by letter on May 31, 2007, by Ron Terry, acting as an agent of the U.S. Department of Housing and Urban Development (HUD), and asked for concurrence with the finding of no effect to historic properties. As of December 2008, no response has been received from the SHPO, which has been supplied a copy of this EA and another opportunity to comment.

In the unlikely event that archaeological resources are encountered during future development activities within the current study area, work in the immediate area of the discovery should be halted and DLNR-SHPD contacted as outlined in Hawai‘i Administrative Rules 13§13-275-12.

3.3 Infrastructure

3.3.1 Utilities

Existing Facilities and Services

Electrical power to the facilities is provided by Hawai‘i Electric Light Company (HELCO), a privately owned utility company regulated by the State Public Utilities Commission, via their island-wide distribution network. Telephone service is provided by Hawaiian Telcom.

Water is supplied to the area by the Hawai‘i County Department of Water Supply via an 8-inch water main on Pawai Place. Wastewater treatment is currently provided to the area by a County sewer main, which connects to the Friendly Place.

Impacts and Mitigation Measures

The proposed action would not have any substantial impact on existing electrical or telephone facilities. Appropriate coordination with HELCO and Hawaiian Telcom will be conducted during the design and construction of the improvements.

It appears there is adequate potable water to service the proposed facility. The project would build a new 8-inch water main extension from the existing water main on Pawai Place to the entrance gate. A new 8-inch fire protection waterline will serve the new onsite fire hydrant. The domestic water service will come from a new 1-1/2-inch meter and a new 2-inch service lateral No capacity problems are anticipated.

The sewer line from the proposed facility will be connected to an existing 6-inch sewer lateral on site which is currently used by the Friendly Place. This sewer lateral is connected to a sewer trunk line onsite, as the project site was formerly part of the County Wastewater Treatment Plant. The capacity of the existing sewer lateral and the trunk line are adequate to serve this facility.

In summary, the utility infrastructure for the facility is adequate and no adverse impacts are expected.

3.3.2 Traffic and Parking

The project site is on Pawai Place, a lightly traveled two-lane, two-way County local road that branches off Kaiwi Street, the main street of the Old Kailua Industrial Area. Pawai Place terminates after 950 feet in a cul-de-sac. A driveway off Pawai Place accesses the project site as well as a County wastewater facility, and parking and access improvements will be limited to the internal drive aisle and parking lot. Parking will consist of 16 stalls, including with one handicap-accessible space. Because of the special nature of the facility, a waiver from parking requirements will be sought from the Hawai‘i County Planning Department.

Traffic at the facility will be minimal and mostly associated with staff and occasional visits by maintenance and social service agencies, as most of the clients do not own cars. The facility will be staffed with two persons in the daytime, two during swing shift, and one during the midnight shift. It will be visited in the mornings by social service providers including a mental health case manager and various other health workers, with no more than 20 visits during a typical week. Total traffic in and out of the facility would probably be less than 20 cars per day, leading to negligible impact on traffic.

In a letter of June 18, 2007 (see Appendix 1a), the Hawai‘i County Police Department expressed concern about the lack of reliable mass transit, which will cause more homeless to be on the streets in the immediate area, as many go on foot or utilize bicycles or mopeds to travel. It should be noted that mass transit has increased since that date and continues to be improved. The location is near bus routes and represents the optimum practical location for mass transit opportunities.

3.3.3 Other Facilities and Services

Other facilities and services relevant to the project include social services (e.g., welfare, mental health, public health), public safety (police, fire and emergency), and recreational (parks and recreational centers).

Fire, police and emergency management services are readily available in Kona. A police substation is located in Kealakehe, about three road miles way. A fire station is located on Palani Road, less than a mile away by road. EMT services are provided by the Hawai‘i County Fire Department out of its Palani Road station. Acute care services are available at Kona Hospital, approximately eight miles to the south.

Recreational facilities in the Kailua area include an Olympic swimming pool, ballfields and a community center, with much of this available less than a mile away at Old Kona Airport.

In a letter of June 18, 2007 (see Appendix 1a), the Hawai‘i County Police Department noted that a large portion of the homeless population has substance abuses issues that will lead to increases in property crimes, violence, and calls for police service.

While it is true that a large population of homeless individuals in a district may impose substantial impacts upon such services, the West Hawai‘i Emergency Housing Facility would tend to reduce impacts relative to the status quo. If those who will occupy the beds are instead forced to remain on the street, they are more likely to have problems related to health, substance abuse, nuisance, and crime (whether victim or perpetrator). In this sense the facility will probably lessen impacts upon these services and facilities.

3.4 Secondary and Cumulative Impacts

Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. At the current time there are no known planned projects immediately near the project site; in the general area, the General Plan calls for expansion of the urban core of Kailua, which will increase traffic, in the area. The new Kona Commons Shopping Center and ongoing improvements to Old Kona Airport State Park and County Park will also increase traffic along with nearby shopping and recreational opportunities. The adverse effects of the project – very minor and temporary disturbance to air quality,

noise, visual and traffic congestion quality during construction – are quite limited in severity, nature and geographic scale, and no cumulative impacts are foreseen.

3.5 Required Permits and Approvals

The following permits and approvals would be required:

- Hawai‘i County Building Division Approval and Building Permit
- Hawai‘i County Planning Department Plan Approval
- Hawai‘i County Public Works Department Grading Permit

3.6 Consistency with Government Plans and Policies

3.6.1 Hawai‘i State Plan

Adopted in 1978 and last revised in 1991 (Hawai‘i Revised Statutes, Chapter 226, as amended), the Plan establishes a set of themes, goals, objectives and policies that are meant to guide the State's long-run growth and development activities. The three themes that express the basic purpose of the *Hawai‘i State Plan* are individual and family self-sufficiency, social and economic mobility and community or social well-being. The proposed West Hawai‘i Emergency Housing Facility would provide services beneficial to the social well being of the poorest segment of the West Hawai‘i community and the project is consistent in every sense with the plan.

3.6.2 Hawai‘i County General Plan and Zoning

The *Hawai‘i County General Plan Land Use Pattern Allocation Guide (LUPAG)*. The LUPAG map component of the *General Plan* is a graphic representation of the Plan's goals, policies, and standards as well as of the physical relationship between land uses. It also establishes the basic urban and non-urban form for areas within the planned public and cultural facilities, public utilities and safety features, and transportation corridors. The project site is classified as High Density Urban in the LUPAG, which is characterized as general commercial, multiple-family residential (up to 87 units per acre) and related services. The proposed project is consistent with this designation, which is intended for residential use, with ancillary community and public uses, and neighborhood and convenience-type commercial uses.

Hawai‘i County Zoning. The project site is zoning designation is General Industrial (MG-1a), where public uses and structures, a permitted under section 25-4-11, are permitted. Plan approval will be required, and the plans must also be reviewed by the Kailua Village Design Commission prior to this review. The property is not situated within the County's Special Management Area (SMA).

3.6.3 Hawai‘i State Land Use Law

All land in the State of Hawai‘i is classified into one of four land use categories – Urban, Rural, Agricultural, or Conservation – by the State Land Use Commission, pursuant to Chapter 205, HRS. The property is in the State Land Use Urban District. The planned use conforms with this State Land Use District designation.

3.6.4 Coastal Zone Management Act Consistency (CZMA)

The purpose of the federal Coastal Zone Management Act (CZMA) of 1972 (U.S.C. 1451-1464) is to preserve, protect, develop and where possible enhance the resources of the coastal zone. Projects with federal involvement significantly affecting areas under jurisdiction of the State CZM Agency must undergo review for consistency with the State's approved coastal program. The entire State of Hawai‘i is included in the coastal zone for such purposes.

The objectives of the Hawai‘i Coastal Zone Management Program are presented below, along with discussion of the consistency of the project with each:

Recreational Resources: *Provide coastal recreational opportunities accessible to the public.* The proposed facility expansion does not affect trails or dedicated public right-of-way or any State, County or federal park. No streams, shoreline areas or other waterways are affected.

Historic Resources: *Protect, preserve, and where desirable, restore those natural and man-made historic and prehistoric resources in the CZM that are significant in Hawaiian and American history and culture*. No significant historic sites eligible for preservation in place will be affected.

Scenic and Open Space Resources: *Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.* No scenic landmarks are present, and the project does not involve the construction of structures visible between the nearest coastal roadway and the shoreline.

Coastal Ecosystems: *Protect valuable coastal ecosystems from disruption and minimize adverse impacts on all coastal ecosystems*. No activities near the coastline are involved, and there will be no effect on coastal ecosystems. All injection wells will conform with appropriate laws and regulations in order to ensure minimal impacts on groundwater and coastal waters.

Economic Uses: *Provide public or private facilities and improvements important to the State's economy in suitable locations*. The location is highly suitable for a social service facility, and the project would not adversely affect existing economic activities.

Coastal Hazards: *Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, and subsidence*. The proposed facility expansion is not adjacent to the coast and no coastal hazards are involved.

Managing Development: *Improve the development review process, communication, and public participation in the management of coastal resources and hazards*. The proposed activity conforms with the State and County land use designations for the area and would support land use in accordance with State and County plans.

Beach Protection. No beaches are present or would be affected by the proposed project

Marine Resources. The project will not affect marine resources in any adverse way.

In summary, the project does not impact these coastal zone resources and appears to be consistent with the objectives of the program. According to the Hawai‘i CZM program (see letter in Appendix 1a), HUD assistance programs, including Community Development Block Grants, do not require review for consistency with the Hawai‘i CZM program.

3.6.5 Kona Community Development Plan

The Kona Community Development Plan (CDP) encompasses the judicial districts of North and South Kona, and was developed under the framework of the February 2005 County of Hawai‘i General Plan. Community Development Plans are intended to translate broad General Plan Goals, Policies, and Standards into implementation actions as they apply to specific geographical regions around the County. CDPs are also intended to serve as a forum for community input into land-use, delivery of government services and any other matters relating to the planning area. The General Plan now requires that a Community Development Plan shall be adopted by the County Council as an “ordinance”, giving the CDP the force of law. This is in contrast to plans created over past years, adopted by “resolution” that served only as guidelines or reference documents to decision-makers. In September 2008, the Kona CDP was adopted by the County Council. The version referenced is this Environmental Assessment is at: http://www.hcrc.info/community-planning/community-development-plans/kona/cdp-final-drafts/KCDP_Final_Draft_Vol1_May2008_rev1.pdf.

The Plan has many elements and wide-ranging implications, but there are several major strategies that embody the guiding principles related to land use, housing, public facilities, infrastructure and services, and transportation.

The West Hawai‘i Emergency Housing facility is generally consistent with all aspects of the Kona CDP. In particular, Guiding Principle 3, “Provide Housing Choices,” specifies

that “future growth should offer a broad range of mixed housing choices with a variety of types and price ranges that are affordable and available in close proximity to places of work. They should also accommodate populations with special needs, including seniors, disabled persons, and *the homeless* [emphasis added].”

The project is also consistent and/or not inconsistent with other goals, objective and policies of the Kona CDP, and in particular with the guiding principles that seek to protect Kona’s natural resources and culture, provide connectivity and transportation choices, provide recreation opportunities, direct future growth patterns toward compact villages to preserve Kona’s rural, diverse, and historical character, provide infrastructure and essential facilities concurrent with growth, encourage a diverse and vibrant economy emphasizing agriculture and sustainable economies, and promote effective governance.

PART 4: DETERMINATION

Based on information to this point, the County of Hawai‘i Office of Housing and Community Development has preliminarily determined that the project will not significantly alter the environment, as impacts will be minimal, and that an Environmental Impact Statement is not warranted, and is thus expected to issue a Finding of No Significant Impact (FONSI). Comments on the Draft EA will be reviewed in order to ascertain whether this anticipated determination is appropriate.

PART 5: FINDINGS AND REASONS

Chapter 11-200-12, Hawai‘i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

1. *The proposed project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* No valuable natural or cultural resources would be committed or lost.
2. *The proposed project will not curtail the range of beneficial uses of the environment.* No restriction of beneficial uses would occur.
3. *The proposed project will not conflict with the State's long-term environmental policies*. The State’s long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The project is minor and fulfills aspects of these policies calling for an improved social environment. It is thus consistent with the State’s long-term environmental policies.
4. *The proposed project will not substantially affect the economic or social welfare of the community or State.* The project would not have any adverse effect on the economic or social welfare of the County or State, and would substantially benefit the social welfare of Kona.

5. *The proposed project does not substantially affect public health in any detrimental way*. The proposed project would not be detrimental to public health in any way, and would allow a non-profit organization to improve the quality of services it provides.
6. *The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities*. No secondary effects are expected to result from the proposed action, which would only improve existing facilities.
7. *The proposed project will not involve a substantial degradation of environmental quality*. The project is minor and environmentally benign, and would thus not contribute to environmental degradation.
8. *The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.* The project site is urbanized and its vegetation is weedy or landscaped, with no habitat for native animals. Impacts to rare, threatened or endangered species of flora or fauna will not occur.
9. *The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.* The project is not related to other activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.
10. *The proposed project will not detrimentally affect air or water quality or ambient noise levels.* No adverse effects on these resources would occur. Mitigation of construction-phase impacts will preserve water quality. Ambient noise impacts due to construction will be temporary and restricted to daytime hours.
11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.* Although the project is located in an area with volcanic and seismic risk, the entire Island of Hawai‘i shares this risk, and the project is not imprudent to construct, and employs design and construction standards appropriate to the seismic zone.
12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.* No scenic vistas and viewplanes will be adversely affected by the project.
13. *The project will not require substantial energy consumption.* The construction and operation of the facility would require minimal consumption of energy. No adverse effects would be expected.

For the reasons above, the proposed action will not have any significant effect in the context of Chapter 343, Hawai‘i Revised Statues and section 11-200-12 of the State Administrative Rules.

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ENVIRONMENTAL ASSESSMENT

WEST HAWAIʻI EMERGENCY HOUSING FACILITY

County of Hawaiʻi
Office of Housing and Community Development

APPENDIX 1a
Comments in Response to Pre-Consultation

Harry Kim
Mayor

Lawrence K. Mahuna
Police Chief

Harry S. Kubojiri
Deputy Police Chief

County of Hawaii

POLICE DEPARTMENT
349 Kapiolani Street • Hilo, Hawaii 96720-3998
(808) 935-3311 • Fax (808) 961-2389

June 18, 2007

Mr. Ron Terry
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

SUBJECT: Environmental Assessment for West Hawaii Homeless Facility, Kailua-Kona, Island of Hawaii, TMK 7-4-10:20

This responds to your letter dated May 31, 2007, requesting comments on the above-referenced subject.

Staff has reviewed your request and submits the following:

- The larger percentage of the homeless population has substance abuse issues. Most do not indulge in their addictions alone. Chemical addictions will lead to an increase in property crimes, violence, and calls for police service in the area.
- There is no reliable public transit system. Most of the homeless travel on foot, bicycle, and sometimes moped. The limited range tends to leave the homeless population near a location of interest for them, for instance a shelter, provider of food, liquor store, etc. An increase in the homeless population on the nearby streets is probable.

Should you have any questions, please contact Captain Randy K. Apele, Commander of the Kona District, at Phone No. 326-4646, ext. 249.

Sincerely,

LAWRENCE K. MAHUNA
POLICE CHIEF

DEREK D. PACHECO
ASSISTANT CHIEF
AREA II OPERATIONS

Harry Kim
Mayor

Christopher J. Yuen
Director

Brad Kurokawa, ASLA
LEED® AP
Deputy Director

County of Hawaii
PLANNING DEPARTMENT
101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-3043
(808) 961-8288 • FAX (808) 961-8742

June 29, 2007

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo HI 96721

Dear Mr. Terry:

SUBJECT: Pre-Environmental Assessment Consultation
Applicant: Hawaii Island Community Development Corporation
Land Owner: County of Hawaii
Project: West Hawaii Homeless Facility
TMK: 7-4-10:20, Kailua-Kona, Hawaii

This is in response to your request for comments on the above-referenced project.

The Office of Social Ministries currently operates a one-stop homeless center offering services to the homeless, including showers, laundry facilities and counseling. The West Hawaii Homeless Facility will be a 32-bed dormitory style project, separated into female and male wings, with programs to aid single adult homeless males and females.

We have the following to offer on the subject parcel:

1. This parcel is designated Urban by the State Land Use Commission.

2. The General Plan designation is High Density Urban which is characterized as *"General Commercial, multiple family residential and related services (multiple family residential – up to 87 units per acre)."*

3. The County zoning is General Industrial (MG-1a). According to the Hawaii County Code, §25-5-152(a)(47), *"Public uses and structures, as permitted under section 25-4-11"* are permitted.

4. According to Hawaii County Code, §25-4-11(c), *"Public uses, structures and buildings and community buildings are permitted uses in any district, provided that the director has issued plan approval for such use"*. Therefore, Plan Approval is required for this housing complex.

5. Plans must be reviewed by the Kailua Village Design Commission prior to Plan Approval review.

6. The project is not located within the County's Special Management Area.

Please provide us with a copy of the Environmental Assessment for our review and file.

If you have questions, please feel free to contact Esther Imamura of this office at 961-8288, extension 257.

Sincerely,

CHRISTOPHER J. YUEN
Planning Department

ETI:cd
P:\wpwin60\ETI\EAdraftPre-consul\Terry W HI Homeless Facility 07.rtf

xc: Planning Department, Kona
OHCD

Harry Kim
Mayor

Christopher J. Yuen
Director

Brad Kurokawa, ASLA
LEED® AP
Deputy Director

County of Hawaii
PLANNING DEPARTMENT
101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-4224
(808) 961-8288 • FAX (808) 961-8742

August 2, 2007

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo HI 96721

Dear Mr. Terry:

SUBJECT: Pre-Environmental Assessment Consultation
Applicant: Office of Housing and Community Development
Land Owner: County of Hawaii
Project: West Hawaii Homeless Facility
TMK: 7-4-10:20, Kailua-Kona, Hawaii

It has come to our attention that our letter dated June 29, 2007 denoted an incorrect applicant. The applicant should have been "Office of Housing and Community Development" instead of "Hawaii Island Community Development Corporation".

We apologize for this inadvertent error and for any inconvenience that this may have caused.

Should you have questions, please feel free to contact Esther Imamura of our department at 961-8288, ext. 257.

Sincerely,

CHRISTOPHER J. YUEN
Planning Director

ETI:cd
P:\wpwin60\ETI\EAdraftPre-consul\TerryWHIHomeless2 7-4-10-20.doc

xc: Planning Department, Kona
OHCD

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

July 3, 2007

HRD07_3066

Ron Terry, Principle
Geometrician Associates
P.O. Box 396
Hilo, Hawai'i 96721

Dear Mr. Terry:

Re: Environmental Assessment and Section 106 Consultation for West Hawai'i Homeless Facility, Kailua-Kona, Island of Hawai'i, TMK 7-4-10:20

The Office of Hawaiian Affairs (OHA) is in receipt of your May 31, 2007 letter seeking comments to be considered for a draft Environmental Assessment (EA) and initiating Section 106 Consultation for the subject project, a 32-bed dormitory with related facilities.

Based on the information provided in your letter, the project area will take place on a 2-acre parcel which has been graded, paved, and formerly served as a wasted water treatment baseyard.

While OHA has no specific comments at this time, we request the opportunity to review the draft EA when it is completed and to be included in any additional Section 106 consultation.

Thank you for the opportunity to provide comments at this early stage in the draft EA process. Should you have any questions, please contact Keola Lindsey, Lead Advocate- Culture at (808) 594-1904.

'O wau iho nō,

Clyde W. Nāmu'o
Administrator

C: Ruby McDonald, OHA- Community Resource Coordinator, West Hawai'i
75-5706 Hanama Place Suite 107, Kailua-Kona, Hawai'i 96740

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2007-I-0197

JUL 6 2007

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, Hawaii 96721

Subject: West Hawaii Homeless Facility, Kailua-Kona, Island of Hawaii

Dear Mr. Terry:

Thank you for your May 31, 2007, letter requesting concurrence that the West Hawaii Homeless Facility, Kailua-Kona, Island of Hawaii (proposed project) is not likely to adversely affect threatened or endangered species or their critical habitat. We received your letter on June 4, 2007. In your letter you did not indicate if the Federal action agency (U.S. Department of Housing and Urban Development) had delegated its authority to you for informal consultation under section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), as amended. Therefore, we have reviewed this project in terms of providing technical assistance directly to you regarding whether or not the proposed project will result in "take" of federally listed species.

The proposed project involves constructing a new dormitory style building on a 2-acre County property on Pawai Place in Kailua's old industrial area. The property was formerly a wastewater treatment baseyard and is completely developed and urbanized.

We reviewed species distribution and critical habitat designations from our files and determined that the federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) (bat) is known from the general area of the proposed project. Take of the bat is not expected because the work will be conducted on an urbanized parcel and existing lighting ordinances should reduce attraction of the bat to the project area. Therefore, we have determined that the project, as proposed, will not result in take of the bat or any other listed species. No critical habitat is present within the proposed project area; therefore, none will be adversely modified or destroyed.

We appreciate the opportunity to review the proposed project. If you have questions regarding these comments, please contact Fish and Wildlife Biologist, Holly Herod, at 808-792-9400.

Sincerely,

for Patrick Leonard
Field Supervisor

LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
EPO-07-122

July 10, 2007

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

SUBJECT: Pre-Assessment Consultation for West Hawaii Homeless Facility
Kailua-Kona, Island of Hawaii, Hawaii
TMK: (3) 7-4-010: 020

Thank you for allowing us to review and comment on the subject application. The application was routed to the various branches of the Environmental Health Administration. We have the following Wastewater Branch and General comments.

Wastewater Branch

Our preliminary investigation shows the project in a Critical Wastewater Disposal Area (CWDA) where no cesspools will be allowed. We also believe that the area is presently sewered by the County. Therefore, all wastewater generated by the project must be disposed of by means of the County sewer system.

All wastewater plans must meet Department's Rules, HAR Chapter 11-62, "Wastewater Systems." We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. If you have any questions, please contact the Planning & Design Section of the Wastewater Branch at 586-4294.

General

We strongly recommend that you review all of the Standard Comments on our website: www.state.hi.us/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to.

If there are any questions about these comments please contact Jiacai Liu with the Environmental Planning Office at 586-4346.

Sincerely,

KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO
WWB

ENVIRONMENTAL ASSESSMENT

WEST HAWAIʻI EMERGENCY HOUSING FACILITY

County of Hawaiʻi
Office of Housing and Community Development

APPENDIX 1b
Survey Results Summary

Friendly Place Neighborhood Survey Summary

Activity: Survey the businesses in the immediate neighborhood surrounding the Friendly Place, a daytime drop-in center for the homeless in West Hawaii.

Purpose:

- To dialogue with neighborhood businesses, at their convenience, about the Friendly Place drop-in center program and services and plans to develop an overnight shelter
- To promote partnerships in West Hawaii to address community health (public safety and health, business attractiveness and prosperity, and the needs of the homeless)

Methodology:

Personnel: Participants from the West Hawaii Community Alliance Partners (CAP):

1. David Garcia (Queen Liliokalani ChildIren's Center)
2. Josephine Ibarra (Office of Social Ministries)
3. Paula DeMello (Office of Social Ministries)
4. Gretchen Lawson (Arc of Kona)
5. Huellyn Whitford (Family Support Services)
6. Roz Cohen (State of Hawaii Department of Health, Adult Mental Health Division)
7. Barbara Kossow (County of Hawaii West Hawaii Mayor's Office)
8. Jeremy McComber (County of Hawaii Office of Housing and Community Development).

Process: (a) Developed standardized survey questions; (b) Compiled list and outreached 65 businesses in immediate area; (c) Recorded survey answers; (d) Reviewed and analyzed findings.

Findings:

44 of 65 businesses (68%) outreached via interviews with owners, managers, and employees.

Question:	***Responses***
1. Do you know about the Friendly Place?	Yes - 39/44 (89%)
2. Have you received a Friendly Place brochure?	Yes - 25/44 (57%); gave to rest
3. Would you like to come to a Talk Story at the FP?	Yes - 23/44 (52%)
4. Are you aware of the CAP/FP Business Meeting?	Yes - 4/44 (9%)
5. Would you like info on the Overnight Shelter?	Yes - 33/44 (75%)

- **Safety/security (**breaking motion lights, someone in dumpster, sleeping on property, parking in business area; some fear and anxiety; buddy with others for safety); window knocked out, worries about theft/burglary – incidents x 2; extinguish lit fire).
- **Worrisome/Offensive Behaviors** (lady screaming about weight loss, asking for directions, walking through property; compulsive water behaviors).
- **Business Facility** (dumping trash, use of water (increased cost?, replacing spigots, urine smell, sleeping on property; messy bathrooms).
- **Need for Service:** (90% "yes" compassion and community; self/family/loved ones with mental illness/substance abuse; support recovery, jobs, and reintegration for population).

Conclusion/Recommendations

1. *Even with concerns, support for shelter outweighs opposition (resistance)*
2. *Business neighbors and FP partnership for info, support, accountability*
3. *Agape Security and Community Policing to assist with safety/security needs*

ENVIRONMENTAL ASSESSMENT

WEST HAWAIʻI EMERGENCY HOUSING FACILITY

County of Hawaiʻi
Office of Housing and Community Development

APPENDIX 2a
Phase I Environmental Site Assessment (portion)

ENHANCED PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
FOR
WEST HAWAII HOMELESS FACILITY
KAILUA-KONA, HAWAII 96740

TMK (3) 7-4-010:020

20.025 ACRES

AUGUST 2007

Environmental Studies and Consulting Services

99-1046 Iwaena St. #210A, Aiea, Hawaii, USA 96701 • 808.484.9214

This Phase I ESA report is prepared for:

Inaba Architecture, L.L.C.
P.O. Box 7133
Kamuela, HI 96743

ENHANCED PHASE I ENVIRONMENTAL SITE ASSESSMENT WEST HAWAII HOMELESS FACILITY KAILUA-KONA, HAWAII 96740 TMK (3) 7-4-010:020

2.025 acres

MNA Job No. 30552

August 8, 2007

Joanna Boyette
Project Manager

Myounghee Noh
Principal Consulting Chemist

Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, Suite 210A
Aiea, Hawaii 96701
Tel (808) 484-9214
Fax (808) 484-4660
Toll free (888) 747-8448
www.noh-associates.com

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LIST OF ABBREVIATIONS

AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation & Liability Information System
CFR	Code of Federal Regulations
CORRACTS	RCRA Facilities that are undergoing "corrective action"
EDR	Environmental Data Resources, Inc.
EO	Executive Order
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
HDOH	Hawaii Department of Health
HEER	Hazard Evaluation and Emergency Response
LUST	Leaking Underground Storage Tank
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
MNA	Myounghee Noh & Associates, L.L.C.
NPL	National Priorities List
PAH	Polynuclear Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
TMK	Tax Map Key
TRIS	Toxic Release Inventory System
TSD	Treatment Storage and Disposal
UIC	Underground Injection Control
USGS	United States Geological Survey
UST	Underground Storage Tank

1.0 EXECUTIVE SUMMARY

Myounghee Noh & Associates, L.L.C. (MNA), was retained to conduct an Enhanced Phase I Environmental Site Assessment (ESA) for the subject site located at 74-5593 Pawai Place, Kailua-Kona, Hawaii, 96740, TMK (3) 7-4-010:020 (Figure 1). This ESA was conducted by Myounghee Noh & Associates, L.L.C., herein referred to as MNA, for Inaba Architecture, L.L.C., P.O. Box 7133, Kamuela, HI 96743. The subject site was owned by the County of Hawaii and operated by the County of Hawaii and The Office of Social Ministry at the time of this ESA.

1.1 FINDINGS SUMMARY

Based on the information obtained during the site assessment performed in October-April 2006, MNA provides the following summary:

- **Database Search for Subject and Adjoining Sites**: The subject and adjoining properties were not listed in any of the federal or state databases searched by EDR (Appendix B). The findings are summarized in the table below.

Search Type	Distance Searched	Findings
Federal NPL Site List	1 mile	None
Federal RCRA CORRACTS TSD Facilities List	1 mile	None
State Hazardous Waste Sites	1 mile	5
Federal CERCLIS List	1/2 mile	None
Federal RCRA Non-CORRACTS TSD Facilities List	1/2 mile	None
State-Equivalent CERCLIS	1/2 mile	None
State Landfill and/or Solid Waste Disposal Site List	1/2 mile	None
State Registered UST List	1/4 mile	11
State Leaking UST List (LUST)	1/2 mile	9
Federal RCRA Generators List	1/2 mile	5
Federal ERNS List	Subject site	None
State Spill List	Subject site	None

- **Site Check**: During a site check and sampling conducted on May 13, 2007, MNA observed the subject site and surrounding areas. The subject site was in use as a base yard for the County of Hawaii and as a care facility by The Office for Social Ministry. The site was partially paved and construction waste was present throughout. Located on the north side of the subject site were several 55-gallon drums containing used oil. The drums were in poor condition; however, MNA did not find evidence of leaks onto the soil. In the northeast corner of the subject site a petroleum odor was evident. MNA was not able to determine the source of the odor based on the visual assessment.

- **Hazardous Materials and Regulated Wastes**: MNA observed several 55-gallon drums of used oil on the subject site. The drums were in poor condition.

- **Storage Tanks**: MNA observed no USTs or ASTs in use at the subject property at the time of this ESA.

- **Surface Soil Sampling:** MNA performed a sampling of soil for the analysis of arsenic. All arsenic results were at or below the HDOH Soil Action Level of 22 mg/Kg.

- **Offsite Contamination Source:** MNA found no evidence of an offsite contamination source that may impact the subject site.

1.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

MNA observed the following *recognized environmental conditions* in connection with the subject property.

- 55-gallon drums of used oil in poor condition at the north side of the subject site.
- Petroleum odor at the northwest corner of the subject site.

2.0 INTRODUCTION

This report presents the findings of a Phase I Environmental Site Assessment (ESA) of the subject site at 74-5593 Pawai Place, Kailua-Kona, Hawaii, 96740, TMK (3) 7-4-010:020 (Figure 1). This ESA was conducted by Myounghee Noh & Associates, L.L.C., herein referred to as MNA, for Inaba Architecture, L.L.C., P.O. Box 7133, Kamuela, HI 96743. The subject site was owned by the County of Hawaii and operated by the County of Hawaii and The Office of Social Ministry at the time of this ESA.

2.1 PURPOSE

The purpose of this Phase I ESA is to identify any *recognized environmental conditions* (REC) at the subject site, with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products. This practice is intended to permit a user to satisfy one of the requirements to qualify for the *innocent landowner defense* to CERCLA liability, "all appropriate inquiry into the previous ownership and uses of the site consistent with good commercial or customary practice." The term *recognized environmental conditions* denotes the presence, or likely presence, of any hazardous substances or petroleum products on the site under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the site or into the ground, ground water, or surface water of the site [American Society for Testing and Materials (ASTM), 2005].

The assessment was performed in accordance with the prescribed practice in *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-00, 2005).

2.2 DETAILED SCOPE OF SERVICES

The Enhanced Phase I ESA has five components: Records Review; Site Reconnaissance; Surface Soil Sampling and Analysis; Interview; Report. MNA conducted the ESA using information sources with the potential to identify past or current releases of hazardous materials at the site. MNA performed the following:

2.2.1 Site History

MNA examined documents consisting of topographic maps, tax records, and aerial photographs. The purpose of this basic research was to identify previous and current uses of the site, adjoining properties, and the surrounding area.

Figure 1. Site Location

2.2.2 Regulatory Records

MNA examined government records with respect to environmental conditions, citations, complaints, and permits at the subject site, at adjoining properties, and the surrounding area. MNA reviewed records from the following federal or state programs:

- National Priorities List (NPL)
- Resource Conservation and Recovery Act (RCRA) facilities that are undergoing "corrective action" (CORRACTS)
- RCRA-Treatment, Storage, & Disposal (TSD)
- Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS) List
- Solid Waste & Landfill
- Leaking Underground Storage Tank (LUST)
- Water Wells
- RCRA-Violators/Enforcement
- Underground Storage Tank (UST) list
- Toxic Release Inventory System (TRIS)
- Emergency Response Notification System (ERNS)
- RCRA-Large Generator
- RCRA-Small Generator
- Spills

2.2.3 Site Reconnaissance

MNA performed a site reconnaissance to obtain information indicating the likelihood of contamination, to interview available site personnel, if any, and conduct a brief assessment of the adjoining properties. During the site reconnaissance, MNA looked for stained surface soil, dead or stressed vegetation, hazardous materials, aboveground and underground storage tanks, disposal areas, groundwater wells, sumps, and storm drains.

2.2.4 Site Geology and Hydrogeology

MNA reviewed published information on surface and subsurface conditions at the site and surrounding area. MNA used this information to assess topography, drainage, surface water bodies, subsurface geology, and groundwater occurrence in the area to assess the impact of migration of any potentially hazardous materials in connection with the site.

2.2.5 Surface Soil Sampling & Analysis

MNA performed soil screening for arsenic. It was suspected that the subject site had been previously used for sugar cane cultivation, and arsenic was a known contaminant in former agricultural lands.

2.2.6 Data Evaluation and Reporting

MNA evaluated the information collected and prepared this report documenting the assessment. Section 2 presents the introduction, Section 3 contains the site description, Section 4 contains information obtained from the user, Section 5 records review, Section 6 site reconnaissance, Section 7 sampling and analysis, Section 8 personal interviews, Section 9 summary of findings, Section 10 opinion, and Section 11 conclusion.

2.3 SIGNIFICANT ASSUMPTIONS

The conclusion presented in this report is based upon the assumption that reasonably ascertainable and relevant information pertaining to the environmental condition of the subject site was made available to MNA during the assessment. Information obtained from government agencies and other resources is presumed to be accurate and updated.

2.4 LIMITATIONS AND EXCEPTIONS

The Phase I ESA provides a "snap shot" of the site conditions and is, by its nature, limited. Summary and conclusion apply to site conditions existing at the time of our investigation and those reasonably foreseeable. They cannot apply to site changes of which MNA is not aware of and has not had the opportunity to evaluate.

This report is based upon visual observations of the site and vicinity, and interpretation of the available historical and regulatory information and documents reviewed. MNA cannot ensure the accuracy of the historical or regulatory information. This report is intended exclusively for the purpose outlined, and applies only to the subject site.

This ESA does not include investigations regarding asbestos, lead paint, or geotechnical concerns.

2.5 SPECIAL TERMS AND CONDITIONS

This Phase I ESA was conducted and prepared by MNA for the exclusive use of Inaba Architecture and County of Hawaii. This report shall not be relied upon or transferred to any other party without written authorization from Inaba Architecture and County of Hawaii.

2.6 USER RELIANCE

This report is an instrument of service of MNA, which summarizes its findings and opinions with respect to the subject site history and *recognized environmental conditions* at the subject site. Note that said findings and opinions are predicated on information that MNA obtained on the dates and from individuals stated herein, from public records review, a site reconnaissance, and ancillary Phase I ESA assignments. This assessment relies upon the accuracy and completeness of the information provided. The information obtained for this assessment is used without extraordinary verification. It is possible that other information exists and is discovered, or environmental conditions change subsequent to submittal of this Phase I ESA report to Inaba Architecture, to which MNA shall not be held responsible for exclusion there from.

3.0 SITE DESCRIPTION

3.1 LOCATION AND LEGAL DESCRIPTION

The subject site is the parcel located at 74-5593 Pawai Place, Kailua-Kona, Island of Hawaii (Figure 1). Tax Map Key of the site is Division 3, Zone 4, Section 4, Plat 010, and Parcel 020. The zoning for the subject site is Industrial. The Fire Insurance Rate Map designation is Coastal Flood Zone with velocity hazard. According to the County of Hawaii record, the parcel consists of approximately 2.025 acres.

3.2 SITE AND VICINITY GENERAL CHARACTERISTICS

Kailua-Kona was originally the home of Hawaii's royalty. King Kamehameha conquered and ruled the Hawaiian islands from Kailua-Kona. Historically, the land in the Kona area has been used for a variety of agriculture, such as sugar cane, bananas, tomatoes, coffee, and macadamia nuts. Today, the economically productive activities in the Kona area are primarily agriculture, the visitor industry, and the supporting commercial and professional service industries.

Industrial development in Kona began in the early 1980s. It was at that time Kona installed its first traffic light (Danninger, 2000). In the 1970 census there were only 365 residents and by 1980 the population had grown to 4,763; its current population of 25,132 is indicative of the dramatic growth of tourism along the Kona coast (U.S. Census Bureau, 2000). The supporting commercial, professional, and institutional facilities and activities for the resident and visitor populations are established in Kailua-Kona and along the existing highway to Captain Cook. Because of the rainfall and soil distribution, much of the agricultural activity is on the eastern side of the highway.

3.2.1 Geology

Published geologic and hydrogeologic reports and maps were reviewed to obtain information regarding subsurface conditions in the general area of the property. The Island of Hawaii is of volcanic origin and was built by the Kohala, Mauna Kea, Mauna Loa, Kilauea, and Hualalai volcanoes and is comprised of numerous thin, extremely permeable tholeiitic basalt lava flows (Stearns, 1985).

Hawaii, the youngest and largest Hawaiian Island, is as large as all the others combined. In 1996, Hazlett and Hyndman described the island as follows:

> It sprawls over an area the size of Connecticut, spanning 90 miles from north to south and 80 miles from east to west. Five large volcanoes coalesce to make the visible part of the Big Island; a sixth lies buried beneath the surface. The southern part of the island is still volcanically active and building out along much of the coastline. To the north, volcanism is in the waning stages. Of all the Hawaiian Islands, the Big Island shows the greatest diversity of rocks and landscapes.

The U.S. Soil Conservation Service mapped the basic soil type of the area as Keaukaha extremely rocky mulch (rKFD). It is a dark brown and strongly acid soil that is approximately 8 inches thick, and follows the undulating topography of the underlying pahoehoe lava flows. Permeability is rapid, runoff moderate, and erosion hazard slight.

Virtually the entire region is covered with prehistoric lavas of the Kau Basalt, onto which long tongues of historic lavas from the northeast rift have flowed. Other than scanty recent alluvium, no sediments occur (Water Resources Research Center, 1993).

3.2.2 Hydrogeology

The permanent source of potable groundwater is a basal aquifer. This aquifer is floating on and displacing salt water, which saturates the base of the island. The basal aquifer is recharged by precipitation. The precipitation percolates through soil and rock until it is either confined by an impermeable layer or is floating on basal salt water (Stearns, 1985). The groundwater in the region is known to be either basal water floating on salt water or water perched on ash, soil, or alluvium and underlain with basal water (Stearns, 1985). In 1993, Water Resources Research Center described the water as follows:

> A voluminous basal lens extends at least 4 miles inland of the coast, beyond which high-level water has been encountered. The lens may reach farther inland, but it has hardly been explored. Toward the rift zone dike-impounded high-level water probably occurs. Elsewhere the high-level water is likely to be perched. The flux of groundwater in the basal lens is enormous; the fresh water springs at Hilo-Waiakea have been measured at 150 million gallons per day (mgd). The gradient is about 5 ft/mile, and the permeability of the basalt is probably at least 5,000 ft/day.

The Hawaii Department of Health (HDOH) has established an Underground Injection Control (UIC) line to serve as a boundary between drinking and non-drinking water portions of underlying aquifers. Areas above the UIC line are within drinking-water portions of the aquifer, while areas below the UIC are within non-drinking water portions of the underlying aquifer. Since the subject site is located on the below the UIC line, it lies within a non-drinking water portion of the local aquifer, and only limited types of injection wells are allowed in the area. Furthermore, injection wells in the area require a UIC Permit or Permit Exemption from the HDOH. According to the Mink & Lau Technical Report #191, published by the University of Hawaii Water Resources Research Center, the subject site is located above one aquifer as indicated in Table 1 (Mink, 1990).

Table 1. Aquifer Classification System

Aquifer Code	**80901111**
Island Code	8 – Island of Hawaii
Aquifer Sector	09 – Hualalai
Aquifer System	01 – Keauhou
Aquifer Type, hydrogeology	1 – Basal
Aquifer Condition	1 – Unconfined
Aquifer Type, geology	1 – Flank
Status Code	**11211**
Development Stage	1 – Currently used
Utility	1 – Ecologically important
Salinity (in mg/L Cl^-)	1 – Low (250 – 1,000)
Uniqueness	1 – Irreplaceable
Vulnerability to Contamination	1 – High

3.3 CURRENT USE OF THE SITE

Currently the subject site is used as a base yard for the Kona Road Department of Public Works, and as a facility for The Office for Social Ministry. Stored on site are heavy machinery and soil stockpiles.

3.4 STRUCTURES, ROADS, AND OTHER IMPROVEMENTS

Structures on the subject site include a storage building used by the County of Hawaii, a portable structure used by the County of Hawaii, a residence used by The Office for Social Ministry, a shed used by the County of Hawaii, and a partially demolished water tank. The subject site is partially paved and there is evidence of a concrete foundation beneath the soil. The site receives water and sewer services from the County of Hawaii.

3.5 PAST USES OF THE SITE

Information regarding past uses of the subject site was obtained from interview, review of tax records, and aerial photographs. The current owner, County of Hawaii, has owned the site since 1966. Table 2 lists the users and property uses of the subject site.

Table 2. Users and Primary Uses of the Subject Sites

Period (approx.)	**Property User**	**Area (acre)**	**Primary Use**
TMK (3) 7-4-010:020			
1966-2007	County of Hawaii	2.025	Sewage treatment plant
Subdivided from 7-4-008:014 in 1966			

3.6 CURRENT AND PAST USES OF ADJOINING PROPERTIES

Information regarding past uses of the adjoining properties was obtained from County of Hawaii tax records and review of aerial photographs. The property use information is summarized in Table 3, and the site location is depicted in Figure 2.

Table 3. Users and Primary Uses of Adjoining Properties

Period (approx.)	Property User	Area (acre)	Primary Use
TMK (3) 7-4-010:017			
1989-2006	Liliuokalani Trust Estate Gold Coast Kona, LLC	1.819	Warehouse
1977-1989	Liliuokalani Trust Estate Clyde D. Coatney Reba Coatney	1.819	Undocumented
1970-1977	Liliuokalani Trust Estate State Development Corp.	1.819	Undocumented
TMK (3) 7-4-010:018			
1988-2001	Liliuokalani Trust Estate Erry, Ltd.	1.692	Warehouse
1987-1988	Liliuokalani Trust Estate Shirley J. Finan Patricia J. Van Kuiken Ann E. Sullivan Carol S. Hines James P. Finan Jr. Robert M. Finan	1.692	Warehouse
1972-1987	Liliuokalani Trust Estate James P. Finan J.P. Finan Gen. Contractor Universal Equipment Co., Ltd. Kona Industries, Inc.	1.692	Undocumented
1970-1972	Liliuokalani Trust Estate James P. Finan J.P. Finan Gen. Contractor Universal Equipment Co., Ltd.	1.692	Undocumented
TMK (3) 7-4-010:021			
1981-1987	Liliuokalani Trust Estate Larry L. Rothacher Mary Lou Adams	4.102	Warehouse
1979-1981	Liliuokalani Trust Estate Cathexis, Ltd.	4.102	Warehouse
1977-1979	Liliuokalani Trust Estate G.L. Landrum	4.102	Undocumented
1973-1977	Liliuokalani Trust Estate	4.102	Undocumented
TMK (3) 7-4-010:022			
1987-1994	Hilo Electric Light Co., Ltd.	6.086	Warehouse
1973-1987	Liliuokalani Trust Estate Hilo Electric Light Co., Ltd.	6.086	Undocumented
TMK (3) 7-4-010:033			
2003-2004	Liliuokalani Trust Estate Taylor Family Limited Partnership	1.000	Warehouse
1986-2003	Liliuokalani Trust Estate Auto Body Hawaii, Inc.	1.000	Warehouse
1978-1986	Liliuokalani Trust Estate March E. Taylor	1.000	Undocumented

Period (approx.)	Property User	Area (acre)	Primary Use
TMK (3) 7-4-010:034			
1996-2001	Liliuokalani Trust Estate W. Gibson, LLC	1.101	Warehouse
1987-1996	Liliuokalani Trust Estate Cantor Bros. Hauling Svc., Inc. Platen Development, Inc. Kona Transportation Co., Inc.	1.101	Warehouse
1984-1987	Liliuokalani Trust Estate Kona Transportation Co., Inc.	1.101	Warehouse
1978-1984	Liliuokalani Trust Estate Platen Development, Inc.	1.101	Undocumented
1977-1978	Liliuokalani Trust Estate Hugo von Platen Luder	1.101	Undocumented

4.0 USER PROVIDED INFORMATION

4.1 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

No environmental liens or activity and use limitations are known for the subject site. The subject site was assessed by MNA for *recognized environmental conditions* including petroleum and other hazardous material releases.

4.2 SPECIALIZED KNOWLEDGE

MNA is unaware of any specialized knowledge pertaining to the subject site.

4.3 VALUATION REDUCTION

MNA is unaware of information pertaining to the valuation reduction of the subject site.

4.4 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The subject site is owned by the County of Hawaii and used as a base yard for the Kona Road Department of Public Works. Also occupying the subject site is a facility operated by The Office of Social Ministry for the aid of the homeless in the Kailua-Kona area.

4.5 REASON FOR PERFORMING A PHASE I

The purpose of this Phase I ESA is to identify any *recognized environmental conditions* at 74-5593 Pawai Place, Kailua-Kona, Hawaii (TMK 7-4-010:020), particularly CERCLA impacts (from hazardous substances releases or spills), which may affect the development of a new homeless facility on the subject site.

Figure 2. Site Map

5.0 RECORDS REVIEW

5.1 STANDARD ENVIRONMENTAL RECORD SOURCES

5.1.1 General Overview

MNA used Environmental Data Resources, Inc., (EDR; 800-352-0050) for searching standard federal and state government databases of known or potential sources of hazardous materials or waste. The record sources are listed in Appendix A, and the EDR assessment report is provided in Appendix B. MNA conducted further local searches as needed.

ASTM E 1527-00 specifies a minimum search distance for specific environmental record sources. The following sources are specified for incidents or sites within one mile of the subject site:

- Federal NPL site list
- Federal RCRA CORRACTS TSD facilities list
- State hazardous waste sites (State-equivalent NPL)

The following sources are specified for incidents or sites within one-half mile of the subject site:

- Federal CERCLIS list
- Federal RCRA non-CORRACTS TSD facilities list
- State-equivalent CERCLIS
- State landfill and/or solid waste disposal site list
- State leaking UST list

The following sources are for incidents on the subject and adjoining properties:

- Federal RCRA generators list
- State registered UST list

Finally, the following is for incidents for the subject site:

- Federal ERNS list

5.1.2 Federal National Priorities List

The NPL, compiled by the Environmental Protection Agency (EPA), is a list of sites with the highest priority for cleanup under the EPA's Hazard Ranking System [40 Code of Federal Regulations (CFR) Part 300]. EDR found no NPL sites within one mile of the subject site (EDR, 2007).

5.1.3 Federal RCRA CORRACTS TSD Facilities List

The RCRA CORRACTS TSD facilities list is compiled by the EPA. The list contains those RCRA regulated facilities, which are undergoing "corrective action" due to a release of hazardous substance. EDR revealed no facilities within one mile of the subject site (EDR, 2007).

5.1.4 State Hazardous Waste Sites (State-equivalent NPL)

The State Hazardous Waste Sites are sites or areas in which the Office of Hazard Evaluation and Emergency Response (HEER) has an interest, has investigated or may investigate. EDR found five hazardous waste sites listed within one mile of the subject site (EDR, 2007). Table 4 lists those sites and a map showing the location with respect to the subject site is provided in Appendix B.

Table 4. State Hazardous Waste Sites

Facility	Site	Address
Pawai St. Oil/Diesel Minor Leak	455 ft. SW	74-5603 Pawai St.
Hawaii Petroleum – Kona Branch (Kona Warehouse)	958 ft. SW	74-5558 Kaiwi St.
Kailua-Kona Chevron	1,409 ft. E	75-5644 Palani Rd.
Firestone Service Center	1,552 ft. E	75-5629 Palani Rd.
Snow White Linen, Former	4,909 ft. SE	75-5705 Kuakini Hwy.

5.1.5 Federal CERCLIS List

The CERCLIS list, compiled by the EPA, contains sites currently or formerly under review by EPA for potential hazardous substance contamination for possible inclusion on the NPL. EDR did not find any CERCLIS sites listed within one mile of the subject site (EDR, 2007).

5.1.6 Federal RCRA non-CORRACTS TSD facilities list

The RCRA non-CORRACTS TSD facilities list, compiled by the EPA, contains RCRA permitted treatment, storage, and disposal facilities. EDR found no RCRA TSD site listed within one mile of the subject site (EDR, 2007).

5.1.7 State Landfill / Solid Waste Disposal Sites

The HDOH records contain an inventory of permitted landfills in the State of Hawaii. EDR found no permitted solid waste landfills, incinerators, or transfer stations within one mile of the subject site (EDR, 2007).

5.1.8 State Registered UST List

This database is compiled by the HDOH Solid and Hazardous Waste Branch, UST section. EDR's search revealed eleven UST sites within 1/4 mile of the subject site. There are no registered USTs currently on the subject or adjoining properties (EDR, 2007). A summary of this finding is presented in Table 5.

Table 5. State Registered UST

UST Facility	Site	Address	Note
Within 1/8 to 1/4 mile:			
Kona Operations Center	719 ft. W	74-5519 Kaiwi St.	**1-Gasoline UST, in use** **1-Diesel UST, in use**
Kona Suisan Inc.	721 ft. WNW	74-5512 Kaiwi St.	1-Gasoline UST, out of use 1-Diesel UST, out of use
Kona Radio Station/Baseyard*	736 ft. W	74-5529 Kaiwi St.	2-Diesel USTs, out of use **1-Diesel UST, in use**
Hawaii Planing Mill, Ltd.	749 ft. WNW	74-5524 Kaiwi St.	1-Gasoline UST, out of use 2-Diesel USTs, out of use 1-Used oil UST, out of use
Kona Industries, Inc.	760 ft. W	74-5483A Kaiwi St.	1-Gasoline UST, out of use
Trojan Lumber Co., Inc.	808 ft. NW	74-5488 Kaiwi St.	1-Gasoline UST, out of use
Gray Line Hawaii, Ltd.	931 ft. NNW	74-5487 Kaiwi St.	1-Diesel UST, out of use 2-Gasoline USTs, out of use 1-Used oil UST, out of use
Robert's Hawaii*	983 ft. NNE	74-5610 Alapa St.	1-Diesel UST, out of use 1-Gasoline UST, out of use
Kona Transportation Co., Inc.*	994 ft. NNE	74-5600 Alapa St.	2-Gasoline USTs, out of use
First Hawaiian Bank VS. E. Hairir	994 ft. NNE	74-5599 Alapa St.	1-Gasoline UST, out of use
Firestone Store #6930*	1,209 ft. SE	75-5629A Palani Rd. North Kona Shopping Center	1-Used Oil UST, out of use

*Listing also found in LUST database.

5.1.9 State Leaking UST (LUST) List

This database is compiled by the HDOH Hazardous Waste Branch, UST section. EDR and HDOH's database searches found nine LUST sites within 1/2 mile of the subject site (EDR, 2007). A summary of these findings is presented in Table 6.

Table 6. State Leaking UST (LUST) Sites

LUST Facility	Site	Address	Incident detail	Detail date
Within 1/8 to 1/2 mile:				
Kona Industrial Subdivision	584 ft. SW	Unit 1 Lot 12 74-5603 Pawai St.	Site cleanup completed	12/01/1999
Kona Radio Station/Baseyard	736 ft. W	74-5529 Kaiwi St.	Site cleanup completed	05/03/1999
Gray Line Hawaii, Ltd.	931 ft. NNW	74-5487 Kaiwi St.	Site cleanup completed	05/03/2005 10/22/1997
Robert's Hawaii	983 ft. NNE	74-5610 Alapa St.	Site cleanup completed	03/30/1999
Kona Transportation Co., Inc.	994 ft. NNE	74-5600 Alapa St.	Site cleanup completed	09/24/1998
Firestone Store #6930	1,210 ft. SE	75-5629A Palani Rd. North Kona Shopping Center	Site cleanup completed	05/11/1999
Goodyear Dealer Expansion	1,389 ft. SE	75-5699 Palani Rd.	Site cleanup completed	02/26/1996
Kailua-Kona Chevron	1,409 ft. E	75-5644 Palani Rd.	Site cleanup completed	06/25/2003
King Kamehameha Kona Beach Hotel	1,551 ft. E	75-5660 Palani St.	Site cleanup completed	08/09/1999

5.1.10 Federal RCRA Generators List

This database, compiled by the EPA, contains RCRA registered small or large quantity generators of hazardous waste. RCRA Large Quantity Generators are facilities that generate at least 1,000 kg/month of non-acutely hazardous waste (or 1 kg/month of acutely hazardous waste). RCRA Small and Very Small Quantity Generators are facilities that generate less than 1,000 kg/month of non-acutely hazardous waste. EDR's search found five Small Quantity generators within 1/4 mile of the subject site (EDR, 2007). A summary of these findings is presented in Table 7.

Table 7. Federal RCRA Generators

Facility	Site	Address	Classification
Ace Hardware	745 ft. NW	74-5500 Kaiwi St.	Small Quantity Generator
Hawaii Petroleum Kona	958 ft. SW	74-5558B Kaiwi St.	Small Quantity Generator
The Glidden Company, DBA, ICI Paints	994 ft. NNE	74-5599 Alapa St.	Small Quantity Generator
Kona Quality Cleaners	1,006 ft. NNE	74-5589 Alapa St.	Small Quantity Generator
Orchid Isle Auto Center Kona	1,213 ft. NNE	74-5598 Luhia St.	Small Quantity Generator

5.1.11 Federal ERNS List

The ERNS list, compiled by the EPA, contains CERCLA hazardous substance releases or spills, as maintained at the National Response Center. EDR's search revealed no reported incident on the subject site (EDR, 2007).

5.1.12 State Spill List

This database is compiled by the HDOH Hazard Evaluation and Emergency Response (HEER) office. EDR and MNA's search revealed no previous spill incidents on the subject site (EDR, 2007; HEER, 2007).

5.2 ADDITIONAL ENVIRONMENTAL RECORD SOURCES

There are no further environmental record sources known to MNA that are likely to have additional environmental information pertaining to the subject property.

5.3 HISTORICAL USE INFORMATION ON THE SUBJECT SITE

5.3.1 Aerial Photographs

Aerial photographs of the subject and adjoining properties were reviewed at the R.M. Towill Corporation in Honolulu. Photographs reviewed are summarized as follows:

1949: Queen Kaahumanu Highway and the city of Kailua-Kona were visible. The subject site appeared vacant.

1953: The subject site remained vacant. Warehouses were visible south of the subject site and the airport to the west.

1968: The subject site remained vacant. To the east hotels and residences were visible in the city of Kailua-Kona.

1977: The subject site was undistinguishable. Warehouses were visible around the subject site and residences to the east.

1980: Structures were visible on the subject site. More warehouses were visible to the north and west.

1989: The water tank was visible on the subject site. More residences were visible to the north.

1992: No significant changes were depicted in the 1992 photograph.

1993: The subject appeared to be in use as a sewage treatment facility. More warehouses were visible to the south.

2000: The water tank was no longer visible on the subject site.

No readily apparent evidence of *recognized environmental conditions* at the subject or adjoining properties was noted on any of the aerial photographs reviewed.

5.3.2 Historical Topographic Maps

Historical United States Geological Survey (USGS) topographic maps for the subject site and vicinity were reviewed for the years 1959, 1982, and 1996. The maps depicted the following:

Quadrangle: Keahole Point, Hawaii Scale: 1:24,000 Series 7.5 Minute

1959: The Kona Airport was visible to the west of the subject site. Also to the west approximately one mile away were several oil and gas tanks. Warehouses were visible in the vicinity of the subject site.

1982: The oil and gas tanks were no longer visible on the 1982 map. Warehouses were visible on and around the subject site.

1996: The map did not show enough detail to view the subject site or surrounding area.

No readily apparent evidence of *recognized environmental conditions* at the subject or adjoining properties was noted on any of the topographic maps reviewed.

5.3.3 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were unavailable for the subject site and surrounding area.

6.0 SITE RECONNAISSANCE

6.1 METHODOLOGY AND LIMITING CONDITIONS

Joanna Boyette conducted the site reconnaissance. The reconnaissance focused on identifying historical, current, and potential CERCLA impacts, which may affect ongoing and expanded use of the subject site. This includes identifying the presence, or likely presence, of any hazardous substances or petroleum products on the site under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the site or into the ground, ground water, or surface water of the site (ASTM E 1527-05, 2005).

6.2 GENERAL SITE SETTING

The subject site is located in Kailua-Kona, Hawaii, and is situated in an industrial park. The site is bordered by warehouses on all sides. The site location is depicted in Figure 2, and photographs are presented in Appendix C.

6.3 HAZARDOUS MATERIALS AND REGULATED WASTES

MNA observed evidence of used oil being stored on the subject site (Photograph 4). The 55-gallon drums used to store oil appeared to be in poor condition. In the northeast corner of the subject site a petroleum odor was evident. MNA was not able to determine the source of the odor.

6.4 UNDERGROUND STORAGE TANKS

MNA observed no signs of storage tanks, such as dispenser pumps, fill pipes, or vent pipes.

6.5 ABOVEGROUND STORAGE TANKS

MNA observed no signs of aboveground storage tanks at the subject site.

6.6 SOLID WASTE DISPOSAL

MNA observed signs of construction waste stored on the subject site.

6.7 PHYSICAL SETTING ANALYSIS AGAINST POTENTIAL MIGRATION

MNA found no potential offsite contamination sources that may migrate to the subject site.

7.0 SAMPLING & ANALYSIS

7.1 PURPOSE

The purpose of this investigation was to screen surface soil samples for arsenic at the project area. Arsenic is one of the heavy metals known to be present in agricultural lands.

7.2 METHODOLGY

Twenty discrete soil samples were collected by Joanna Boyette and Jessica West using a hand-held auger and glass jars on May 13, 2007. At each sampling location, samples were collected from varying depths between 0 to 12” below ground surface. After separating twigs, roots, gravel, and rocks, the soil samples were transferred to glass jars and labeled before being transferred to the laboratory.

7.3 LABORATORY ANALYTICAL RESULTS

Advanced Analytical Laboratory performed the laboratory analysis by the EPA method 7061. Included in this section is a summary of the analytical results, and the complete laboratory results are provided in Appendix D.

All arsenic results were found to be at or below the HDOH Soil Action Level of 22 mg/Kg. The results for arsenic are presented in Table 8 and a sample location map in Figure 2.

Table 8. Arsenic Analyses of Soils

Sample ID	Depth	Location	Arsenic, mg/Kg (EPA 7061)
A1	1-12”	Southeast DPW building	20
A2	1-12”	East of OSM building	10
A3	1-12”	South of OSM building	None detected
A4	1-12”	South of OSM building	2.4
A5	1-12”	Northwest of DPW building	None detected
A6	1-12”	West of DPW building	None detected
A7	1-12”	West of OSM building	None detected
A8	1-12”	West section of base yard	None detected
A9	1-12”	Central section of base yard	None detected
A10	1-12”	Northwest section of base yard	2.3
A11	1-12”	East section of base yard	None detected
A12	1-12”	Central section of base yard	None detected
A13	1-12”	Soil stockpile	None detected
A14	1-12”	South of 55-gallon drums	None detected
A15	1-12”	North of water tank	None detected
A16	1-12”	East of water tank	1.6
A17	1-12”	North of portable	3.9
A18	1-12”	East of portable	None detected
A19	1-12”	Southeast section of parking lot	3.6
A20	1-12”	South section of parking lot	22
***HDOH Soil Action Level**			22

*Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final – May 2005

8.0 INTERVIEWS

8.1 COUNTY OF HAWAII

MNA interviewed Barbara Kossow from the Office of the Mayor of the County of Hawaii (808-329-5226). Ms. Kossow stated that the subject site had previously been used as a wastewater facility by the state. She was not sure of uses prior to that. Currently the site is used by the Kona Road Department of Public Works and The Office for Social Ministry. She was unaware of any hazardous materials or regulated wastes.

8.2 THE OFFICE FOR SOCIAL MINISTRY

MNA interviewed Carol Ignacio of The Office for Social Ministry (808-935-3050). Ms. Ignacio stated that The Office for Social Ministry has been operating the care facility for homeless people for approximately one year. The center provides lockers, showers, a washer dryer, computer access, and employment assistance through the residence located on the subject site. She was unaware of any hazardous materials or regulated wastes.

9.0 SUMMARY OF FINDINGS

Based on the information obtained during the site assessment performed in May – July 2007, MNA provides the following summary:

- **Database Search for Subject and Adjoining Sites**: The subject and adjoining properties were not listed in any of the federal or state databases searched by EDR (Appendix B). The findings are summarized in the table below.

Search Type	Distance Searched	Findings
Federal NPL Site List	1 mile	None
Federal RCRA CORRACTS TSD Facilities List	1 mile	None
State Hazardous Waste Sites	1 mile	5
Federal CERCLIS List	1/2 mile	None
Federal RCRA Non-CORRACTS TSD Facilities List	1/2 mile	None
State-Equivalent CERCLIS	1/2 mile	None
State Landfill and/or Solid Waste Disposal Site List	1/2 mile	None
State Registered UST List	1/4 mile	11
State Leaking UST List (LUST)	1/2 mile	9
Federal RCRA Generators List	1/2 mile	5
Federal ERNS List	Subject site	None
State Spill List	Subject site	None

- **Site Check**: During a site check and sampling conducted on May 13, 2007, MNA observed the subject site and surrounding areas. The subject site was in use as a base yard for the County of Hawaii and as a care facility by The Office for Social

Ministry. The site was partially paved and construction waste was present throughout. Located on the north side of the subject site were several 55-gallon drums containing used oil. The drums were in poor condition; however, MNA did not find evidence of leaks onto the soil. In the northeast corner of the subject site a petroleum odor was evident. MNA was not able to determine the source of the odor based on the visual assessment.

- **Hazardous Materials and Regulated Wastes**: MNA observed several 55-gallon drums of used oil on the subject site. The drums were in poor condition.
- **Storage Tanks**: MNA observed no USTs or ASTs in use at the subject property at the time of this ESA.
- **Surface Soil Sampling:** MNA performed a sampling of soil for the analysis of arsenic. All arsenic results were at or below the HDOH Soil Action Level of 22 mg/Kg.
- **Offsite Contamination Source:** MNA found no evidence of an offsite contamination source that may impact the subject site.

10.0 OPINION

It is MNA's opinion that the background levels of arsenic do not pose a threat to the subject site. There is a potential for a used oil release onto the soil due to the poor drum conditions. The stored oil may need to be pumped out prior to moving or disposing the drums.

11.0 CONCLUSION

MNA performed an enhanced Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E 1527-05 of the property located at 74-5593 Pawai Place, Kailua-Kona, Island of Hawaii. Any exceptions to, or deletions from, this practice are described in Section "2.4 LIMITATIONS AND EXCEPTIONS." This assessment has revealed the following evidence of *recognized environmental conditions* in connection with the property:

- 55-gallon drums of used oil in poor condition at the north side of the subject site.
- Petroleum odor at the northwest corner of the subject site.

REFERENCES

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APPENDIX A

Regulatory Record Sources

- National Priorities List (NPL) - The NPL is the U.S. Environmental Protection Agency's (EPA) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the U.S. Department of Health and Human Services and the EPA in order to become an NPL site.

- CORRACTS - The EPA maintains this database of Resource Conservation and Recovery Act (RCRA) facilities that are undergoing "corrective action." A "corrective action order" is issued pursuant to RCRA Section 3008(h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.

- RCRA-Treatment, Storage, & Disposal (TSD) CORRACTS - The EPA's RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities, which report generation, storage, transportation, treatment, or disposal of hazardous waste.

- Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS) List - The CERCLIS list contains sites, which are either proposed to or on the NPL and sites, which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities.

- NFRAP - NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

- RCRA-TSD - The RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities, which report generation, storage, transportation, treatment, or disposal of hazardous waste. RCRA TSDs are facilities, which treat, store and/or dispose of hazardous waste.

- Solid Waste & Landfill - The database can be obtained from the Hawaii Department of Health (HDOH), Solid and Hazardous Waste Branch (808.586.4240).

- Leaking Underground Storage Tank (LUST) - This database can be obtained from the HDOH Solid and Hazardous Waste Branch Underground Storage Tank (UST) Section (808.586.4226).

- Water Wells - The Ground Water Site Inventory (GWSI) database was provided by the U.S. Geological Survey (USGS, 702.648.6819). The database contains information for

over 1,000,000 wells and other sources of groundwater, which the USGS has studied, used, or otherwise had reason to document through the course of research.

- RCRA-Viol/Enf - The RCRA Program identifies and tracks hazardous waste from the point of generation to the point of disposal. RCRA Violators are facilities, which have been cited for RCRA Violations at least once since 1980. RCRA Enforcements are enforcement actions taken against RCRA violators.

- UST list - This database can be obtained by the HDOH UST Section (808.586.4226). The agency release date for UST Section Database was January 2002.

- Toxic Release Inventory System (TRIS) - Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as SARA Title III) of 1986 requires the EPA to establish an inventory of Toxic Chemicals emissions from certain facilities. Facilities subject to this reporting are required to complete a Toxic Chemical Release Forms (Form R) for specified chemicals.

- Emergency Response Notification System (ERNS) - This is a national database containing records from October 1986 to the release date below and is used to collect information for reported releases of oil and hazardous substances (202.260.2342). The database contains information from spill reports made to federal authorities including the EPA, the U.S. Coast Guard, the National Response Center, and the Department of Transportation.

- RCRA-LgGen - RCRA Large Generators are facilities, which generate at least 1,000kg/month or non-acutely hazardous waste (or 1kg/month of acutely hazardous waste).

- RCRA-SmGen - RCRA Small and Very Small Generators are facilities, which generate less than 1,000kg/month or non-acutely hazardous waste.

- SPILL - This database can be obtained from the HDOH Hazard Evaluation Emergency Response office (HEER, 808.586.4249). The Spills list provides a short description of circumstances of each spill.

APPENDIX B

Photographs

Photograph 1. A view of the building on the subject site used by the Kona Road Department of Public Works as a storage facility (May 13, 2007).

Photograph 2. A view of the building on the subject site used by The Office for Social Ministry as a homeless care facility (May 13, 2007).

Photograph 3. A view of the portable on the subject site used by the County of Hawaii (May 13, 2007).

Photograph 4. A view of the remains of a water tank located on the subject site (May 13, 2007).

Photograph 5. A view of the 55-gallon drums containing used oil. The drums were in poor condition; however no leaks or stains were observed (May 13, 2007).

Photograph 6. A closer view of unlabeled 55-gallon drums stored on the subject site (May 13, 2007).

Photograph 7. A view of paints, lubricants, and batteries stored on the subject site (May 13, 2007).

Photograph 8. A view 55-gallon drums (shown in photograph 5) stored on the subject site. A pile of what appeared to be crushed asphalt is shown in the background (May 13, 2007).

Photograph 9. A view of a soil stockpile located on the subject site (May 13, 2007).

Photograph 10. A view of a 55-gallon drum found on the north corner of the subject site. The drum was empty; however, a petroleum odor was evident in the area (May 13, 2007).

Photograph 11. A view of a sewage pipeline on the subject site. An abandoned empty 55-gallon drum was observed (May 13, 2007).

Photograph 12. A view of the sewage pipeline on the subject site (May 13, 2007).

Photograph 13. A view of a street cleaning vehicle located on the subject site (May 13, 2007).

Photograph 14. A view of construction debris on the subject site (May 13, 2007).

Photograph 15. A view of equipment room used by the Kona Road Department of Public Works (May 13, 2007).

Photograph 16. A view of the parking lot at the subject site (May 13, 2007).

Note:

For reasons of bulk, Appendix C and subsequent contents not reproduced in EA

On file at:

Office of Housing and Community Development
50 Wailuku Drive
Hilo HI 96720

Contact: Chris Fujiuchi, 961-8379

ENVIRONMENTAL ASSESSMENT

WEST HAWAIʻI EMERGENCY HOUSING FACILITY

County of Hawaiʻi
Office of Housing and Community Development

APPENDIX 2b
Phase II Environmental Site Assessment (portion)

PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT
WEST HAWAII HOMELESS FACILITY
74-5593 PAWAI PLACE
KAILUA-KONA, HAWAII 96740

OCTOBER 2008

Environmental Studies and Consulting Services

99-1046 Iwaena St. #210A, Aiea, Hawaii, USA 96701 • 808.484.9214

This Phase II ESA report is prepared for:

Inaba Architecture, L.L.C.
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PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT
WEST HAWAII HOMELESS FACILITY
74-5593 PAWAI PLACE
KAILUA-KONA, HAWAI'I 96740

MNA Job No. 50755

October 3, 2008

Evan Pfaff, P.E.
Environmental Engineer

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LIST OF ABBREVIATIONS

bgs	Below Ground Surface
C&T	Curtis & Tompkins Analytical Laboratory
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	Chemicals of Potential Concern
DU	Decision Unit
EAL	Environmental Action Level
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
HDOH	Hawaii Department of Health
HEER Office	Office of Hazard Evaluation and Emergency Response
HELCO	Hawaiian Electric Light Company
IDW	Investigation Derived Waste
mg/kg	milligram per kilogram
MIS	Multi-Increment Samples
µg/kg	microgram per kilogram
mm	millimeter
MNA	Myounghee Noh & Associates, L.L.C.
ND	Non-Detect
OHCD	Office of Housing and Community Development
PCBs	Polychlorinated Biphenyls
PPE	Personal Protective Equipment
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RSD	Relative Standard Deviation
SVOCs	Semivolatile Organic Compounds
TGM	Technical Guidance Manual
TPH-D	Total Petroleum Hydrocarbons as Diesel
TPH-O	Total Petroleum Hydrocarbons as Oil
VOA	Volatile Organic Analysis
VOCs	Volatile Organic Compounds
WWTP	Wastewater Treatment Plant

1.0 EXECUTIVE SUMMARY

Myounghee Noh & Associates, L.L.C. (MNA), was retained to conduct a Phase II Environmental Site Assessment (ESA) for the subject property located at 74-5593 Pawai Place, Kailua-Kona, Hawaii, 96740. The subject property was identified in county records by Tax Map Key (TMK) (3) 7-4-010:020. This ESA was conducted by Myounghee Noh & Associates, L.L.C., herein referred to as MNA, for Inaba Architecture, L.L.C. At the time of this ESA the subject site was owned by the County of Hawai'i, and the property was utilized by the Department of Highways, County of Hawai'i, and the Office of Housing and Community Development (OHCD), County of Hawai'i.

The purpose of this Phase II ESA was to confirm the presence or absence of any *recognized environmental conditions* (REC) at the subject property, with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products. Additionally, the purpose of this Phase II ESA was to identify potential risks from environmental contaminants to construction workers and occupants of the planned redevelopment of a portion of the property.

Management of the west half of the property is being transferred from the Department of Highways to the OHCD for the construction and operation of an emergency shelter and homeless care facility. A Phase I ESA conducted by MNA in August 2007 identified the presence of two RECs at the subject property. These were the poor condition of petroleum storage drums at the shed on the center of the north property line of the property, and a petroleum odor in the northwest corner of the property. The identification of RECs and the planned redevelopment of the property triggered a Phase II ESA.

1.1 Sampling and Analysis

MNA focused this Phase II ESA on the west half of the property where the proposed redevelopment was to take place, but did address both RECs identified in the Phase I ESA even though the shed drum storage area was not part of the planned redevelopment.

The subject area was divided into four decision units (DUs) as described in Section 3.1, and depicted in Figure 2 of this report. Surface multi-increment samples (MIS) were collected from each DU with a triplicate collected from DU B. Surface samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D), TPH as oil (TPH-O), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and Resource Conservation and Recovery Act (RCRA) metals-arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

One subsurface grab sample was collected from 16 to 24 inches below ground surface from each DU and analyzed for the same analytes as the MIS samples plus volatile organic compounds (VOCs).

During subsurface sampling in DU A, petroleum odor was present from spoil and sample material. In DU B, two one-foot diameter pools of petroleum product were visible. This area was excluded from the DU with increments collected from the remaining area. Portions of DU D were covered with asphalt paving. Increments from DU D were collected from areas with exposed surface soil.

1.2 Results and Conclusions

Within the context of a well-designed sampling and analysis plan, the analytical results of sample analysis were compared against the Environmental Action Level (EAL) for soil with unrestricted land use above a non-drinking water resource and greater than 150 meters from surface water, and the available quality control data (QC).

VOCs or SVOCs were not detected in any of the samples. Arsenic, barium, cadmium, chromium, lead, and selenium were either detected at concentrations well below the EAL or were not detected. Results for mercury were predominantly an order of magnitude below the EAL but also had a high Relative Standard Deviation (RSD) within the triplicate samples. Silver was found to be above the EAL in DU B, which was not anticipated based on the Phase I ESA. TPH-O was above the EAL in DU A and B and is likely close to or slightly above the EAL in DU C and D based on the QC data. PCBs did not exceed the EAL in any of the MIS samples. However, variability in the QC samples suggested that at least in DU B the average concentration was near the EAL.

The outcome of this Phase II ESA is that *recognized environmental conditions* do exist within all of the DUs of the investigation area with respect to the selected EAL. The REC identified in DU A is the presence of TPH-O in surface soil. The three RECs identified in DU B include the presence of free product petroleum, silver in surface soil, and TPH-O in surface soil. The REC identified in DU C and D is the presence of TPH-O in surface soil.

1.3 Recommendation

It is recommended that no further investigation or remediation is needed for the western portion of the property, and that the redevelopment proceed as planned with concurrence from the HEER Office. This recommendation is made based on the following observations and conditions:

- The free petroleum product observed in DU B will be cleaned up.
- Any further investigation or clean-up of the TPH in DU A soil can continue and will not be hindered by the redevelopment plan for the western half of the property.
- Silver and mercury concentrations are anomalous to the conceptual site model and are possibly an artifact of laboratory error. In the context of the site they do not pose a risk.
- Grading and vegetation of areas will aerate the soil and increase biological activity accelerating natural attenuation of TPH.
- TPH-O does not pose a vapor intrusion concern to the proposed building.
- Redevelopment of the site will reduce exposure to contaminants by placing a building and paved parking area over much of the site.

2.0 INTRODUCTION

Myounghee Noh & Associates, L.L.C. (MNA), was retained to conduct a Phase II Environmental Site Assessment (ESA) for the subject property located at 74-5593 Pawai Place, Kailua-Kona, Hawaii, 96740. The subject property was identified in county records by Tax Map Key (TMK) (3) 7-4-010:020. This ESA was conducted by Myounghee Noh & Associates, L.L.C., herein referred to as MNA, for Inaba Architecture, L.L.C. At the time of this ESA the subject site was owned by the County of Hawai'i, and the property was utilized by the Department of Highways, County of Hawai'i, and the Office of Housing and Community Development (OHCD), County of Hawai'i. Figure 1 presents a site location map.

2.1 Purpose

The purpose of this Phase II ESA was to confirm the presence or absence of any *recognized environmental conditions* (REC) at the subject property, with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products. Additionally, the purpose of this Phase II ESA was to identify potential risks from environmental contaminants to construction workers and occupants of the portion of the property planned for redevelopment.

2.2 Site Background

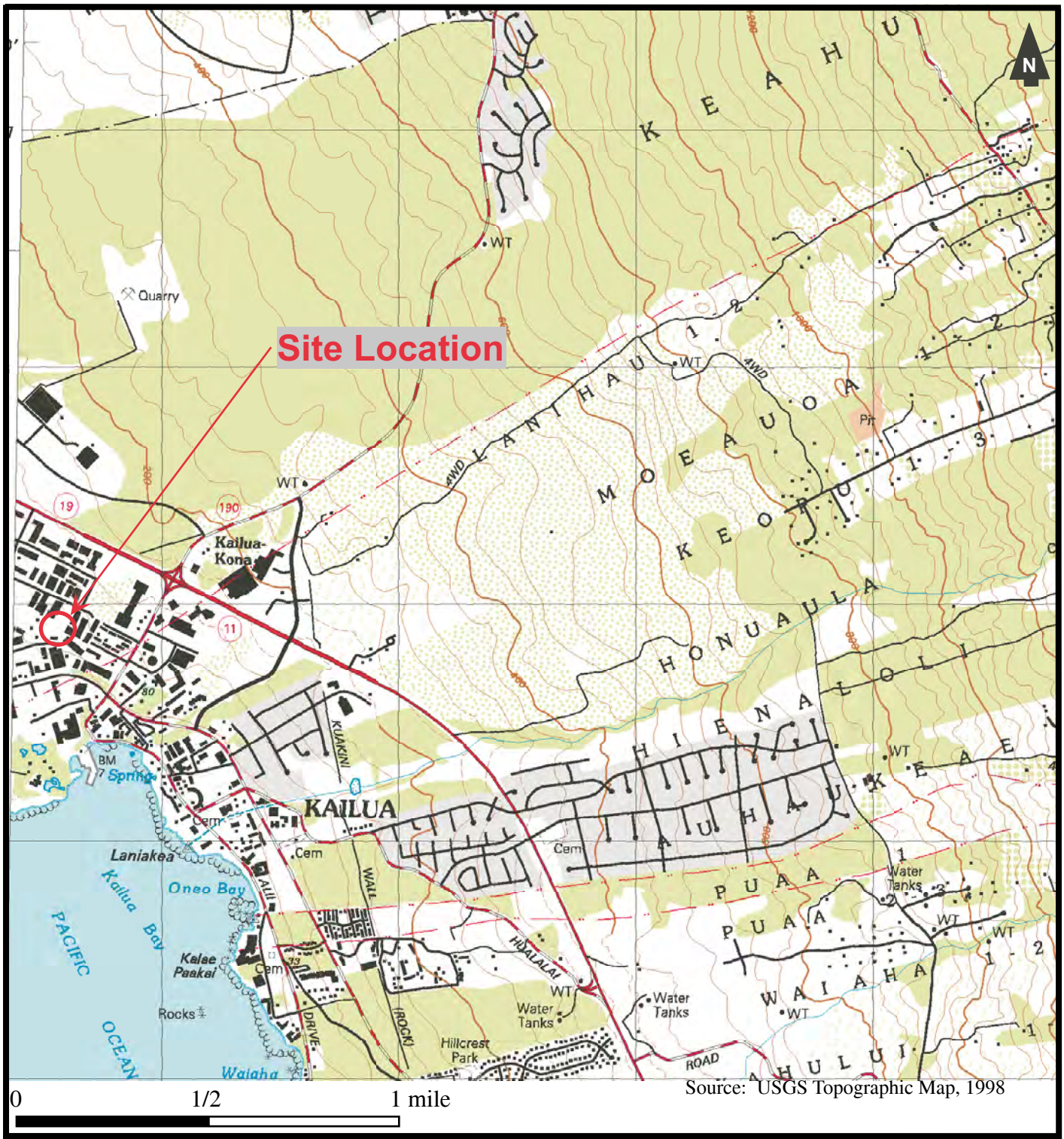
Management of the west half of the property is being transferred from the Department of Highways to the OHCD for the construction and operation of an emergency shelter and homeless care facility. A Phase I ESA conducted by MNA in August 2007 identified the presence of two RECs at the subject property. These were the poor condition of petroleum storage drums in and around a shed on the center of the north property line of the property, and a petroleum odor in the northwest corner of the property. The identification of RECs and the planned redevelopment of the property triggered a Phase II ESA.

3.0 SAMPLING

The following section describes various aspects of the sampling conducted by MNA on July 8, 2008. Table 1 summarizes this information.

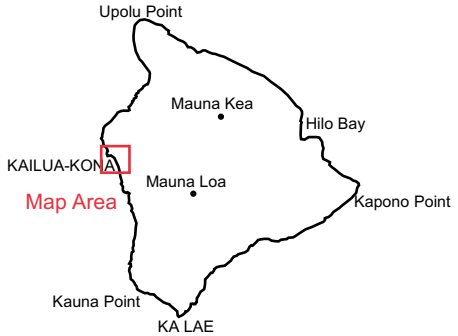
3.1 Decision Units

In order to address both RECs identified during the Phase I ESA and evaluate risk to construction workers and occupants of the OHDC facility, MNA divided the project area into four decision units. Figure 2 presents a site sketch that shows the layout of the site and the delineation of the DUs.



Source: USGS Topographic Map, 1998

Figure 1. Site Location Map



Phase II ESA
West Hawai'i Homeless Facility
Kailua-Kona, Island of Hawai'i
TMK (3) 7-4-010:020

October 2008
Job No. 50755

Myounghee Noh & Associates, L.L.C.

Sample ID	Sample Type	Sample Matrix	Location	Depth	Analyte (EPA Analytical Method)	Container	Preservative
755A-G1	Grab	Soil	DU A	16"	VOC (8260), SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	16 oz glass jar + 3 40ml VOA	VOC: methanol, water ALL: 4°C
755B-G1	Grab	Soil	DU B	18-24"	VOC (8260), SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	16 oz glass jar + 3 40ml VOA	VOC: methanol, water ALL: 4°C
755C-G1	Grab	Soil	DU C	18-24"	VOC (8260), SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	16 oz glass jar + 3 40ml VOA	VOC: methanol, water ALL: 4°C
755D-G1	Grab	Soil	DU D	18-24"	VOC (8260), SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	16 oz glass jar + 3 40ml VOA	VOC: methanol, water ALL: 4°C
755A-M1	MI	Soil	DU A	0-2"	SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	1 Liter Wide mouth glass	4°C
755B-M1	MI	Soil	DU B	0-2"	SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	1 Liter Wide mouth glass	4°C
755C-M1	MI	Soil	DU C	0-2"	SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	1 Liter Wide mouth glass	4°C
755D-M1	MI	Soil	DU D	0-2"	SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	1 Liter Wide mouth glass	4°C
755B-M2	MI	Soil	DU B	0-2"	SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	1 Liter Wide mouth glass	4°C
755B-M3	MI	Soil	DU B	0-2"	SVOC (8270), RCRA8 Metals (6010/7000), PCB (8082), TPH-D/O (8015M)	1 Liter Wide mouth glass	4°C

Notes:

MIS consisted of 30 10-gram increments.

MIS were dried, sieved, and subsampled to a minimum of 10 grams.

VOC soil sample were 5 grams. Two VOAs were water preservation and would be analyzed if received within 48 hour hold time. Third VOA was methanol for analysis if hold time was not met.

###X-Y#

###-project number

X-Decision Unit (A, B, C, or D)

Y-Sample Type (**G**rab or **M**ulti-Incremental)

#-Sequential Sample Number for previously unique identifiers

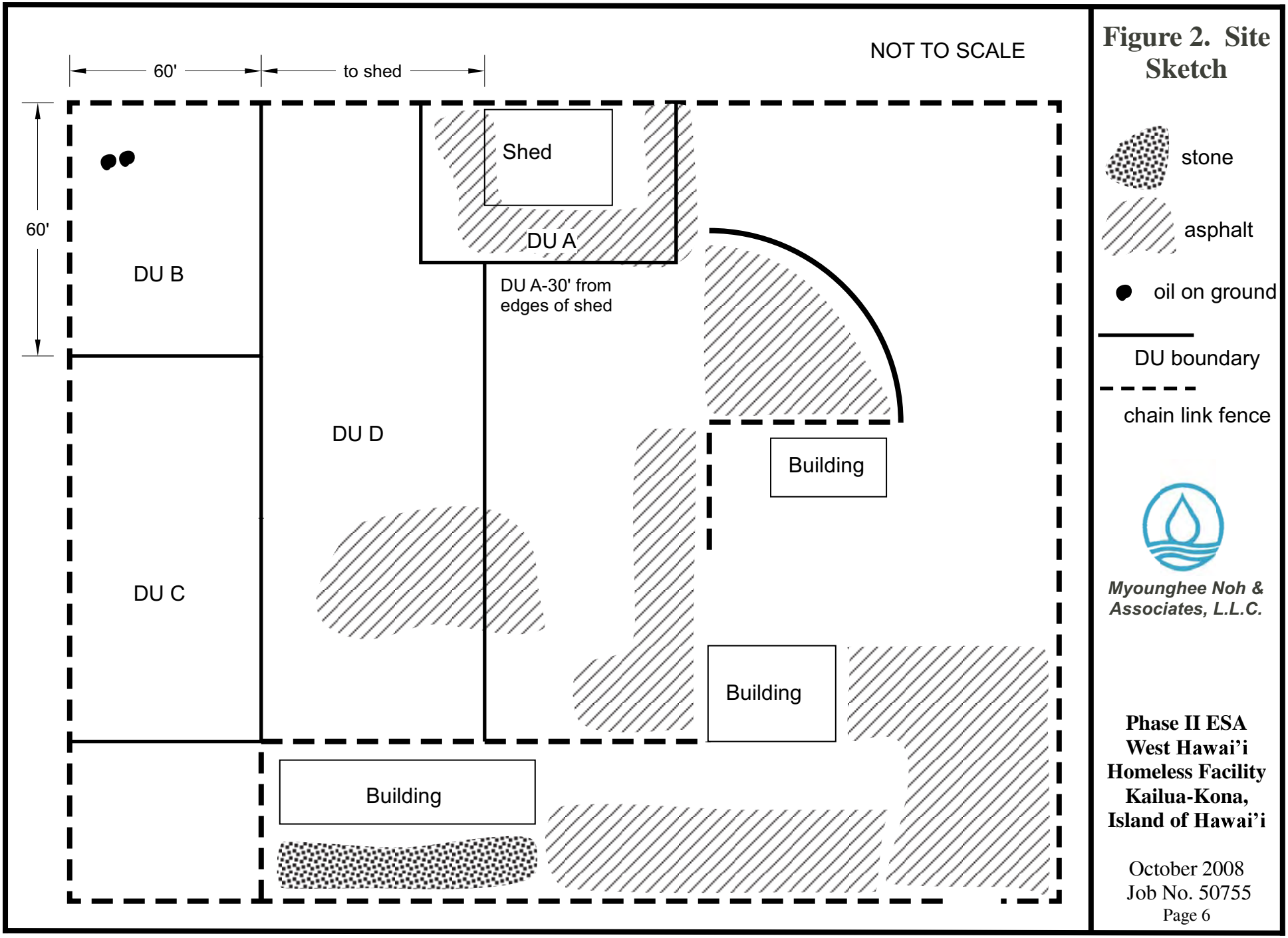


Figure 2. Site Sketch

Myounghee Noh & Associates, L.L.C.

Phase II ESA
West Hawai'i
Homeless Facility
Kailua-Kona,
Island of Hawai'i

October 2008
Job No. 50755

DU A covered the shed drum storage area and was planned as a rectangle extending 10 feet from the edge of the shed on the west, east, and south sides (Appendix B, Photographs 1-3). During field activities, it was found that this area was covered with asphalt paving. Therefore, the extent of the DU was extended to 30 feet beyond the boundary of the shed, just beyond the extent of the paved area. The purpose of this DU was to address a potential environmental hazard that had been identified during the Phase I ESA.

DU B covered the northwest corner of the property and extended 60 feet east and south from the property corner (Appendix B, Photograph 4). Included in this area is the north half of the proposed building and the area identified to have petroleum odors during the Phase I ESA. The purpose of this DU was to address a potential environmental hazard that had been identified during the Phase I ESA and to identify potential risks from environmental contaminants to construction workers and occupants of the planned redevelopment of a portion of the property.

DU C covered the southwest portion of the redevelopment area, which is the south end of the proposed building (Appendix B, Photograph 4). The DU extended 60 feet east from the west property fence and south from DU B to the south property fence. The purpose of this DU was to identify potential risks from environmental contaminants to construction workers and occupants of the planned redevelopment of a portion of the property.

DU D covered the remainder of the redevelopment area, which is primarily proposed asphalt topped parking area (Appendix B, Photograph 5). It extended from the north property fence to the south property fence and east from DU B/C to the west edge of the shed, which is the planned extent of redevelopment activities.

3.2 Sample Collection

Surface multi-increment samples (MIS) were collected from each DU with a triplicate collected from DU B. Thirty 10-gram increments were collected for each MIS sample by walking up and down alternate rows across the DU and randomly collecting increments using a Terra Core sampler. Increments were placed into a sample grade 1-liter wide-mouth glass jar. The duplicate and triplicate MIS samples from DU B were collected by repeating the sampling process and not by concurrent increment collection. Approximately 50% of DU A, and 25% of DU D were covered with mostly contiguous asphalt paving and therefore increments could not be collected. Increments for DU A and DU D were collected randomly from areas with exposed surface soil. Two pools of petroleum product approximately one foot in diameter were observed in the northwest corner of DU B (Appendix B, Photograph 4, 6, 7). This area was excluded from DU B, and MIS increments were collected randomly from the remainder of the DU.

Volatile organic compounds (VOCs) were chemicals of potential concern (COPC) because of their ability to infiltrate into buildings (vapor intrusion) and contribute to indoor air quality issues. Hawaii Department of Health (HDOH), Office of Hazard Evaluation and Emergency Response (HEER), Technical Guidance Manual (TGM) indicates that soil samples for VOCs must be collected at a depth of 18 to 24 inches below the ground surface (bgs) in order to

minimize volatization losses (HDOH-HEER, 1997). Therefore, a subsurface grab sample was collected from each DU at a depth of 16 to 24 inches bgs. The grab samples were located horizontally as follows:

- DU A grab sample was located in front of the shed at the front edge of the asphalt paving, an area suggestive of the REC identified in the Phase I ESA.
- DU B grab sample was placed in the northwest corner of the DU, an area suggestive of the REC identified in the Phase I ESA.
- DU C grab sample was placed in the center of the DU beneath the footprint of the proposed building.
- DU D grab sample was placed in the center of the DU beneath the footprint of the proposed asphalt parking area.

Near surface soil throughout the project site is composed of compacted crushed stone and fines. Initial efforts to collect the subsurface samples was made with a hand auger and proved unsuccessful. Subsequently an electric jackhammer and manual shovel were used to loosen and remove surface material until a minimum of 18 inches depth was achieved. Once the required depth was achieved, the VOC grab sample was immediately collected from undisturbed material using a Terra Core sampler and placed into a pre-weighed, pre-preserved volatile organic analysis (VOA) container. Three cores were taken at each sample location so that different preservation methods could be used. Two of the VOA contained deionized water and one contained methanol. Losses of VOCs by this method of collection are not expected to be any higher than for conventional sample collection methods because the sample was collected from the undisturbed subsurface environment and immediately preserved.

Following collection of the VOC sample, a trowel was used to collect undisturbed subsurface soil and place it in a 4-ounce sample grade glass jar for additional analyses.

Grab samples from DU B, C, and D were collected within the desired depth range of 18 to 24 inches bgs. The grab sample from DU A was collected at 16 inches bgs when the excavation met refusal.

Large pieces of vegetation such as roots, sticks, and leaves were absent from the project area soils. Therefore, samples were collected whole and no material was rejected from the sample.

3.3 Preservation

All samples were labeled and recorded in field notes and a chain of custody document. Samples were placed in a cooler and chilled to 4°C with frozen gel and wet ice for transport to the analytical laboratory. VOC samples were preserved in VOAs containing either methanol or deionized water. Both methods of preservation were utilized to ensure an appropriate sample was available if the holding time for deionized water preservation was exceeded.

3.4 Transportation

Samples were packed in one of two coolers with frozen gel ice and wet ice, and the coolers were sealed with custody tape. The coolers were transported under chain-of-custody to the analytical laboratory via Federal Express courier.

3.5 Decontamination

Decontamination needs were reduced through the use of disposable sampling equipment. Sampling equipment requiring decontamination was limited to the equipment used to collect the grab samples and included a trowel, shovel, and jackhammer bit. Sampling equipment was decontaminated between sample collection using a four step process as outlined below:

- Gross soil and materials were brushed from the equipment.
- Equipment was washed with a sampling grade detergent.
- Equipment was rinsed with municipal water.
- Equipment was rinsed with deionized water.

3.6 Investigation Derived Waste

Investigation derived waste (IDW) was minimized through the selection of sampling techniques and the use of disposable sampling equipment. IDW was managed in accordance with the HEER Office, TGM (HDOH-HEER, 1997). IDW included excavated soil, decontamination fluids, disposable personal protective equipment (PPE), and disposable sampling equipment. Less than one cubic yard of excavated soil was generated during the investigation and it was used to backfill excavations, remaining onsite. Approximately seven gallons of decontamination fluids were generated during this investigation, and it was ground spread across the DUs, remaining onsite. Less than one gallon of PPE and disposable sampling equipment was generated during this investigation. This material was bagged and disposed of in a municipal waste dumpster.

3.7 Quality Control

Several measures were taken to ensure the quality of the samples and the analytical data. The following quality control practices were utilized in this assessment.

- Triplicate MIS were collected from DU B to support the repeatability of the sampling technique and analytical practice.
- Temperature blanks were transported with each sample cooler to ensure samples were properly preserved.
- A trip blank sample was transported with the VOA sample containers from the field to the laboratory and analyzed for VOCs to ensure that cross-contamination did not occur.
- Sample transport coolers were closed with custody seals to prevent tampering.

4.0 ANALYSIS

Samples were analyzed by Curtis & Tompkins Analytical Laboratory (C&T) of Berkeley, California. C&T is long-standing and well-respected laboratory with several Department of Defense and state certifications. C&T holds a National Environmental Laboratory Accreditation Program certificate from the State of California. This certificate is included in Appendix A.

MIS were prepared by air-drying the sample material on a large sheet prior to sieving through a 2-millimeter (mm) screen. Clots or chunks of soil were broken up with a mortar and pestle and then sieved. Rocks and larger particles were rejected from the sample. Sample material passing the 2 mm screen was distributed evenly on a flat sheet and sub-sampled for each analysis.

Surface MIS were analyzed for:

- Total petroleum hydrocarbons as diesel (TPH-D) and TPH as oil (TPH-O) by EPA (Environmental Protection Agency) Method 8015M
- Semivolatile organic compounds (SVOCs) by EPA Method 8270
- Polychlorinated biphenyls (PCBs) by EPA Method 8082
- Resource Conservation and Recovery Act (RCRA) metals-arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver by EPA Methods 6010/7000.

Subsurface grab samples were analyzed for the same analytes as the MIS plus VOCs by EPA Method 8260. MIS analysis for RCRA metals deviated from standard metals analysis by increasing the sub-sample digestion mass from one to 10 grams to ensure a representative particle distribution in accordance with HEER Office guidance (HDOH-HEER, 2007).

5.0 RESULTS

Analytical results were received from the laboratory and have been summarized in Table 2. The complete analytical report is included in Appendix A. The case narrative for the analytical data indicates that a low bias for silver may be present in the results for MIS from DU C and one of the MIS samples from DU B. This was identified due to a low recovery in a laboratory batch quality control test. The laboratory was unable to reanalyze these samples because insufficient sample material was available due to the large fraction of particles greater than 2 mm in the soil matrix that were rejected by the sieve. TPH analysis indicated that the chromatographic pattern did not resemble the standard for many of the samples.

During the collection of the grab sample from DU A, 755A-G1, a petroleum odor was present in the spoil and sample material. Two pools of free petroleum product approximately one foot in diameter were present in the northwest corner of DU B.

None of the samples contained detectable concentrations of VOCs and SVOCs. All samples contained some level of TPH-D and TPH-O. Most samples contained PCBs and RCRA metals.

Mean, standard deviation, and relative standard deviation (RSD) were calculated for each analyte using the analytical results of the three MIS collected from DU B. Results of the data assessment calculations are presented in Table 2.

			Grab Samples				Multi-Increment Samples							Data Assessment			
Analyte	**RL**	**EAL**	755A-G1	755B-G1	755C-G1	755D-G1	755A-M1	755B-M1	755B-M2	755B-M3	755C-M1	755D-M1	Blank1	DU B triplicate mean	DU B triplicate standard deviation	DU B RSD	Notes
VOC (µg/kg)	varies	varies	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	
SVOC (µg/kg)	varies	varies	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	
RCRA8 (mg/kg)																	
Arsenic	0.25	20	0.6	2	**5.7**	4.2	3.4	4.1	5.2	4.9	3.3	2.3	NA	4.7	0.6	12%	
Barium	0.25	750	12	25	78	15	40	100	100	**140**	98	63	NA	113	23.1	20%	
Cadmium	0.25	12	ND	ND	0.8	ND	1.1	1.3	1.1	**2.5**	0.55	0.36	NA	1.6	0.8	46%	
Chromium	0.25	500	36	29	41	31	55	64	56	**67**	64	52	NA	62	5.7	9%	
Lead	0.25	200	2.2	8.8	47	8	79	65	67	**93**	57	28	NA	75	16	21%	
Mercury	0.02	10	ND	0.1	0.1	ND	0.3	0.75	0.9	**5.8**	0.13	0.066	NA	2.5	2.9	117%	
Selenium	0.5	10	5.2	ND	1.8	ND	3.5	ND	4.7	**5.6**	ND	3	NA	5.2	0.6	12%	
Silver	0.25	20	ND	2.6	1.7	ND	4.5	39	**64**	*32*	*1.2*	0.66	NA	45	17	37%	Note 1
TPH (mg/kg)																	
Diesel C-10-C24	>5.0	500	**240**	7.3	57	13	130	70	95	**240**	45	34	NA	135	92	68%	Note 2
Motor Oil C24-C36	>25	500	430	53	310	70	540	490	600	**1400**	340	280	NA	830	497	60%	
PCB (µg/kg)	varies																
Aroclor-1016	12		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	N/A	N/A	N/A	
Aroclor-1221	24		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	N/A	N/A	N/A	
Aroclor-1232	12		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	N/A	N/A	N/A	
Aroclor-1242	12		ND	ND	ND	ND	ND	220	47	280	24	15	NA	N/A	N/A	N/A	
Aroclor-1248	12		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	N/A	N/A	N/A	
Aroclor-1254	12		ND	14	43	ND	69	200	190	420	41	19	NA	N/A	N/A	N/A	
Aroclor-1260	12		ND	61	58	ND	130	270	170	330	54	71	NA	N/A	N/A	N/A	
TOTAL PCBs	NA	1100	ND	75	101	ND	199	690	407	**1030**	119	105	NA	709	312	44%	Note 3

Notes:
1) Samples 755C-M1 and 755B-M3 may be biased low for silver based on lab quality control results. See lab report narrative.
2) Analytical laboratory reports abnormal chromatograph. See lab report narrative.
3) Total PCBs are calculated as the sum of Aroclors.
EAL-Environmental Action Level for soil with unrestricted land use above a non-drinking water resource and greater than 150 meters from surface water.
µg/kg-micrograms per kilogram
mg/kg-milligrams per kilogram
ND-Not Detected
NA-Not Analyzed
N/A-Not Applicable
RSD-Relative Standard Deviation
RL-Reporting Limit

Table Formatting:
maximum value
low biased result
value exceeds EAL

6.0 DISCUSSION

Within the context of a well-designed sampling and analysis plan, the analytical results of sample analysis were compared to the Environmental Action Level (EAL) for soil with unrestricted land use above a non-drinking water resource and greater than 150 meters from surface water, and the available quality control (QC) data.

Analytical results for VOCs and SVOCs indicated the absence of these analytes at detectable concentrations in the investigation area.

With the exception of silver and mercury, RSD values for metals are low and results are significantly below the EAL. This strongly indicated that concentrations of these metals were well below the EAL. The RSD for mercury was 117%, indicating low repeatability of the data. However, analytical results for five of the six MIS samples were at least one order of magnitude below the EAL. In conjunction with the possibility of laboratory subsampling error and the established difficulty in mercury analysis, it seems unlikely that mercury exceeded the EAL in any of the DUs.

Silver is another metal that is traditionally difficult to analyze. The RSD for the MIS triplicate from DU B was 37%, which is similar to the ideal maximum of 35%. Silver concentrations for DU A, C, and D were significantly below the EAL and are likely representative. The concentrations of silver in all three DU B MIS triplicates exceeded the EAL. However, there is little reason to expect silver as a contaminant on this property and these results are highly unexpected. The numeric results suggest that the concentration of silver in DU B exceed the EAL. However these results should be viewed cautiously due to the unexpected nature of the results, the laboratory identified difficulties with silver in at least one batch of samples, and the identified difficulties in silver analysis.

Sample concentrations of TPH-O exceeded the EAL in DU A and B. However, the high RSD value of 60% raised questions about the concentration of TPH-O in DU C and D that generated results of 340 and 280 milligrams per kilogram (mg/kg), respectively. It is likely that TPH-O approached or slightly exceeded the EAL in all four DUs.

None of the analytical results for PCBs exceeded the EAL; with four of six samples being less than half the EAL value. However, an RSD of 44% and a standard deviation of 312 micrograms per kilogram (µg/kg) suggested that the average concentration in many of the DUs may be higher. In DU A, C, and D it is unlikely that the average PCB concentration exceeded the EAL. In DU B, the concentration likely approached the EAL.

Table 3 summarizes this discussion by identifying analytes and DUs where the EAL is likely approached or exceeded.

Table 3. Summary of EAL Exceedance Evaluation

	DU A grab	DU B grab	DU C grab	DU D grab	DU A MIS	DU B MIS	DU C MIS	DU D MIS
Depth (bgs)	16"	18-24"	18-24"	18-24"	0-2"	0-2"	0-2"	0-2"
VOCs	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	-	-	-	-	-	-	-	-
Barium	-	-	-	-	-	-	-	-
Cadmium	-	-	-	-	-	-	-	-
Chromium	-	-	-	-	-	-	-	-
Lead	-	-	-	-	-	-	-	-
Mercury	-	-	-	-	-	-	-	-
Selenium	-	-	-	-	-	-	-	-
Silver	-	-	-	-	-	E	-	-
TPH-D	-	-	-	-	-	-	-	-
TPH-O	-	A	-	-	E	E	A	A
PCBs	ND	-	-	ND	-	A	-	-

ND-not detected
A-analytical result approaches EAL
E-analytical result exceeds EAL

7.0 CONCLUSIONS

The outcome of this Phase II ESA is that *recognized environmental conditions* do exist within all of the DUs of the investigation area with respect to the selected EAL. The REC identified in DU A is the presence of TPH-O in surface soil. The three RECs identified in DU B include the presence of free product petroleum, silver in surface soil, and TPH-O in surface soil. The REC identified in DU C and D is the presence of TPH-O in surface soil.

8.0 CONCEPTUAL SITE MODEL

The western half of the property appears to have been impacted by contamination with metals, PCBs, and a variety of petroleum hydrocarbons. The release of these materials to the property appears to have been limited to the near surface soil with the exception of the area surrounding the shed where petroleum hydrocarbons are present at elevated levels in the near subsurface.

The property has a long history of use as an industrial site within a historically industrial area, which explains the presence of industrial pollutants. Prior to its use by the Department of Highways, the site was a wastewater treatment plant (WWTP). A variety of petroleum products would have been used at the WWTP as well as the possible presence of PCBs in electrical equipment including transformers. In its current use as a Department of Highways equipment and operations yard, a variety of petroleum products, highway debris, and wash water would have been present on the site. It is likely that over time, management practices may have resulted in the release of petroleum products and hazardous materials or waste.

This release may have been intentional, inadvertent, or a combination of the two. Road debris and other materials brought on site and exposed to rainwater could have deposited materials onto the soil of the property. Additionally, adjacent to the west end of the property is a Hawaiian Electric Light Company (HELCO) yard. It is likely that at one time this facility may have stored PCB containing transformers and would continue to store a variety of petroleum products. A release of PCBs or petroleum product from this site could have easily migrated, through wind and water action, onto the adjacent subject property.

Less easily explained is the presence of elevated silver levels in DU B. Although heavy metals are commonly found in used motor oil, which could have been released onto the site, it seems unlikely that only elevated levels of silver would be found if this was the source of the contamination. The silver may be attributable to a particular process associated with WWTP or HELCO operations or could be the result of a particular type of road debris which may have been accumulated and stored in that area.

9.0 RECOMENDATIONS

The following recommendations are made based on the understanding that management of the property currently lies with the Department of Highways, County of Hawai'i, and that the intention is to turn over management responsibility of the redeveloped portion of the property to the OHCD, County of Hawai'i.

It is recommended that responsibility for addressing the presence of TPH-O in DU A not impact the planned redevelopment, as the area is not planned for turn over to OHCD and redevelopment. Redevelopment plans will not affect remediation efforts in the DU and the existing condition does not pose a risk to construction workers or occupants of the proposed facility.

It is recommended that a response action be taken to remediate the release of free petroleum product visible within DU B. The release and response action should be reported to, and coordinated with, the HEER Office.

It is recommended that the elevated levels of silver and TPH-O in DU B, as well as TPH-O in DU C and D, not trigger additional investigation or remediation, nor impact redevelopment plans. Although silver and TPH-O are found in the DUs at average concentrations approaching or exceeding the EAL, within the context of the site and the planned redevelopment, they do not pose a risk to construction workers or future occupants of the property. This recommendation should only be carried out with concurrence from the HEER Office. Under the proposed redevelopment plan, over 50% of DU B, C, and D is within the footprint of the proposed building or asphalt topped parking area. This will drastically reduce accessibility of occupants to these soils. Neither silver nor TPH-O will result in a vapor intrusion issue, and the impacted surface soil will likely be removed from the footprint itself. Redevelopment plans also include grading and revegetation of the site. This will aerate the soil and increase biological activity promoting natural attenuation of petroleum hydrocarbons. Although silver will not degrade through biological activity, the

presence of vegetation on the site will tend to bind the silver and reduce its mobility, availability, and accessibility.

10.0 REFERENCES

HDOH-HEER. (2008, Summer). EAL Surfer: Screening for Environmental Hazards at Sites with Contaminated Soil and Groundwater. Honolulu, HI.

HDOH-HEER. (2007). *Pesticides in Former Agricultural Lands and Related Areas- Updates on Investigation and Assessment. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater.* Honolulu: State of Hawai'i, Dpeartment of Health, Hazard Evaluation & Emergency Response.

HDOH-HEER. (1997). *Technical Guidance Manual for the Implementation of the Hawai'i State Contingency Plan.* Honolulu: State of Hawai'i, Department of Health, Hazard Evaluation & Emergency Response.

Note:

For reasons of bulk, Appendix A and subsequent contents not reproduced in EA

On file at:

Office of Housing and Community Development
50 Wailuku Drive
Hilo HI 96720

Contact: Chris Fujiuchi, 961-8379

ENVIRONMENTAL ASSESSMENT

WEST HAWAIʻI EMERGENCY HOUSING FACILITY

County of Hawaiʻi
Office of Housing and Community Development

APPENDIX 3
Federal Environmental Assessment
(in Final Federal EA, State EA is Exhibit B, of which this is final page)

U.S. Department of Housing
And Urban Development
Pacific/Hawai‘i Office of
Community Planning and Development
Environmental Branch

Environmental Assessment

(HUD recommended format per
24 CFR 58.36, revised 1/99)

Project Identification: **West Hawai‘i Emergency Housing Facility**

Preparer: **Geometrician Associates**

Responsible Entity: **County of Hawai‘i, Office of Housing and Community Development**

January 2009

Responsible Entity:	County of Hawai‘i, Office of Housing and Community Development
Certifying Officer:	Leah H. Yanagi, Interim Housing Administrator
Project Name:	West Hawai‘i Emergency Housing Facility
Project Location:	Kailua-Kona, North Kona District, Island of Hawai‘i
Estimated Total Project Cost:	$1.8 million
Grant Recipient:	County of Hawai‘i, Office of Housing and Community Development
Recipient Address:	50 Wailuku Drive, Hilo, Hawai‘i 96720
Project Representative:	Leah H. Yanagi, Interim Housing Administrator
Telephone Number:	(808) 961-8379

FINDING:

☑ **Finding of No Significant Impact** (The project will not result in a significant impact on the quality of the human environment)

☐ **Finding of Significant Impact** (The project will result in a significant impact on the quality of the human environment)

12/19/08

Preparer Signature _____ Date _____

Title/Agency Principal, Geometrician Associates, Consultant

Below to be signed upon completion of review period

Signature _____ Date _____

Title/Agency Housing Administrator, County of Hawai'i Office of Housing and Community Development

Signature _____ Date _____

Title/Agency Director, County of Hawai'i, Planning Department

Signature _____ Date _____

Title/Agency Deputy Corporation Counsel, County of Hawai'i, Corporation Counsel

Approving Official Signature _____ Date _____

Title/Agency Mayor, County of Hawai'i

Statement of Purpose and Need for the Proposal:

Description of the Proposal: Include all contemplated actions which are logically either geographically or functionally a part of the project, regardless of the source of funding.

The West Hawai‘i Emergency Housing Facility is one facet of the County's response to the increasing problem of homelessness in West Hawai‘i. The Office of Social Ministries currently operates for the County the Friendly Place, a one-stop center offering services to the homeless, including showers, laundry facilities and counseling. The proposed project would expand these services to construct a 31-bed dormitory style facility separated into female and male wings, with programs to aid single adult homeless males and females. The facility will include lockers, two bathrooms (male and female) with 3 toilets and 3 showers, a laundry facility, a kitchen, a common room, and a Resident Manager office. The project would take place on a portion of a 2.025-acre County property on Pawai Place in Kailua's Old Industrial Area, which formerly served as a wastewater treatment baseyard (see Exhibit A). Because of the special nature of the facility, a waiver from parking requirements will be sought from the Hawai‘i County Planning Department. A landscape plan will be developed during design and implemented at construction.

The County of Hawai‘i would subdivide the property (with the remainder continuing to be used by other County departments), build the emergency housing facility and then lease it to a service provider who would operate it as an emergency housing facility. Although operational details will be finalized by the service provider, it is expected that the facility would be staffed with two persons in the daytime, two during swing shift, and one during the midnight shift. The West Hawai‘i Emergency Housing Facility will not be a drop-in shelter. In order to be eligible, clients will be referred by a social service agency and then screened by the service provider at the drug- and alcohol-free facility. Clients will typically utilize the facility mostly from evening through early morning. A secure front gate will be locked for vehicles after curfew, with ingress and egress for clients allowed only as required by job schedules. The facility will be fully fenced and there will be a security camera system. The facility will be visited in the mornings by social service providers including a mental health case manager and various other health workers. Typically no more than two staff will be present, and as few clients own vehicles, traffic in and out of the facility will generally, be light, consisting of these workers, social service providers and maintenance companies.

The Emergency Housing Facility is envisioned as one part of a continuum of care from drop-in services to emergency housing to transitional housing to independent occupation of a residence. To be served, clients will have to be employed or actively seeking work. A variety of social service agencies will assist the clients, including Adult Mental Health, Care Hawai‘i Mental Health, and Family Support Services. Other agencies actively involved in assisting homeless individuals include the St. Michael's Church, which works with HIV-positive individuals, Moku Ai Kaua Church, and the Neighborhood Place of Kona, which works with families. There will be no tolerance for drugs and alcohol, and clients will be tested for drugs randomly or with cause. Clients who abuse drugs will be referred to programs such as the Big Island Substance Abuse Council (BISAC) or the Bridge House, who are better equipped and situated to deal with these problems.

The construction budget for the project is about $1.8 million, which may be funded by County, State, federal and/or private agencies. The operational budget will be determined by the service provider, which, after obtaining a lease from the County, will be responsible for securing operating funds from sources such as HUD's Emergency Shelter Grant (ESG) funds, the State's Homeless Stipend Program, and the County's Human Services Grant. In addition, providers also access funding through private sources such as the Harry & Jeanette Weinberg Foundation, United Way, etc. The project is currently expected to begin construction in 2009 to be operational sometime later in the year.

The Friendly Place – a one-stop center offering services to the homeless, including showers, laundry facilities and counseling – would require temporary relocation to another property, probably in the Old Industrial Area, during construction

The property is completely developed and urbanized, and surveys and consultation have determined that no significant archaeological, cultural or biological resources are present.

Existing Conditions and Trends: Describe the existing conditions of the project area and its surroundings, and trends likely to continue in the absence of the project.

The population of the island has grown in tandem with visitor industry growth, from 63,468 in 1970, to 92,053 in 1980, to 120,137 in 1990, and to 148,677 in 2000 – a growth of 234 percent in 30 years, which has continued in the 8 years since 2000. This growth rate exceeds the statewide rate of 157 percent during the same period. Each of the last three decades has seen an addition of roughly 30,000 individuals to the population of Hawai'i County. If this trend continues, the population will equal about 180,000 by the year 2010. Based on the latest estimate from the County– 173,057 in July 2007 (http://co.hawaii.hi.us/databook_current/Table%201/1.1.pdf) – this figure will likely be exceeded. While East Hawai'i still contains the majority of the island's population and agriculture, and is also the administrative and educational center of the island, West Hawai'i's visitor industry makes it the center of economic activity and the fastest growing area as well. This is particularly true in North Kona and South Kohala, where most tourist resort housing and hotels are located. On any given day, visitors account for over 12 percent of the de facto population – and most are in these two districts. Despite the current downturn, the Hawai'i State Department of Business, Economic Development and Tourism forecasts slow but steady growth in the population and economy of the Big Island over the coming decades. The State projects that agricultural jobs will decline, while jobs in health, information, business services, transportation, and tourism-related services will increase steadily. The forecast expects tourism to continue as the lead industry, but allows for some diversification in local businesses over time.

Prosperity has not been spread equally. In 2003, a consortium of county and State agencies from around the State of Hawai'i commissioned a study of the homeless population in order to provide policy makers and service program managers with accurate information on the extent, characteristics, and causes of homelessness (SMS 2004). Key findings include:

- There was a total of 1,243 homeless persons in the County of Hawai'i on any given day in August 2003. This represented an alarming increase from earlier estimates, although a lack of appropriate data complicated comparison.

- Only about 239 individuals, or 12 percent of this homeless population, were in some kind of shelter, apparently because of a lack of supply rather than low demand for shelter space. In July of 2003, the County had nine functioning shelters with a combined capacity of 193 persons per night. Transitional shelters housed 110 homeless persons and emergency shelters housed 139 at the time of the count.
- Locations where unsheltered homeless slept included tents, garages, caves, outside, and in vehicles, among which they often tended to rotate.
- About 16 of those interviewed said they were employed – 50 percent full-time and 23 percent part-time. About 12 percent said they were occasionally employed. They reported that disability, health problems and not being able to find work made employment difficult.
- Just over half (56 percent) of all interviewed homeless persons reported being of Hawaiian or part-Hawaiian ancestry, with 43 percent stating that they were 50 percent or more Hawaiian. Of this latter group, more than half said they were on the waiting list for a Hawaiian Home Lands homestead award, while about a quarter had once been a lessee.
- About 41 percent of the unsheltered homeless suffered from mental illness. Some 40 percent had a physical illness, and 36 percent suffered from both. About 18 percent self-reported substance abuse.
- Almost half of homeless people were homeless as members of a family, although most homeless families have only adult members. Persons in families with children make up about one quarter of all homeless, about 14% of the homeless were children.
- The most commonly cited reason for homelessness was a problem paying rent. Unemployment, substance abuse, release from prison, and family conflicts were also frequently mentioned.

Another less comprehensive Point-In-Time-Count was conducted on January 31, 2007 (FAQ Hawai‘i 2007). This count estimated a total of 1,108 homeless persons on the Big Island, fewer than in 2003, probably because of the omission of several shelters. The urban Kailua-Kona area had an estimated 67 homeless individuals at the time of the count. No emergency housing for the homeless is available in West Hawai‘i, although there are various programs that assist families.

A significant finding was that there was an increase of 25 percent in the “unsheltered chronically homeless” population. A chronically homeless person is defined as an unaccompanied homeless individual with a disabling condition who has either been continuously homeless for a year or more or has had at least four episodes for homelessness in the past three years.

The County of Hawai‘i has been collaborating with various State agencies and particularly with private non-profits to alleviate the homelessness problem. Assembled in order to quality for funding from the U.S. Department of Housing and Urban Development (HUD), the Hawai‘i Island Community Alliance Partners (CAP) represents the official planning group on homelessness in Hawai‘i County. The mission of the CAP is to assist individuals and families who become homeless or are at-risk of becoming to regain their housing stability and a greater quality of life.

For construction of facilities such as the Friendly Place and the proposed West Hawai‘i Emergency Housing Facility, the County’s Office of Housing and Community Development assumes the central role of applying for funding, securing the land, and issuing construction contracts. To operate these facilities, the County typically seeks service providers to operate the programs under a multi-year lease to provide community outreach. In this model, the non-profit is also responsible for maintenance, repair and liability. Service providers typically receive money from County, State and federal grants, the United Way, churches, and private donations.

Index of References and Exhibits

Exhibit	Reference
A	Maps, Photos and Plans
B Note: In public-circulated version of EA, State EA *precedes* this document	State of Hawai‘i Final Environmental Assessment, including appendices: APPENDIX 1a Comments in Response to Pre-Consultation APPENDIX 1b Survey Results Summary APPENDIX 2a Phase I Environmental Site Assessment (portion) APPENDIX 2b Phase II Environmental Site Assessment (portion)
C.	Wild and Scenic Rivers by State, National Park Service Web Page, checked December 2008 http://www.rivers.gov/wildriverslist.html
D.	Nonattainment Area List, U.S. Environmental Protection Agency Web Page, checked December 2008 http://www.epa.gov/oar/oaqps/greenbk/astate.html [note: Hawai‘i not listed as non-attainment]
E.	CZM Consistency Material
F.	EPA Map of Sole Source Aquifers in Hawai‘i, checked December 2008 http://www.epa.gov/safewater/swp/ssa/reg9.html [none on Big Island]
G.	Letter from the U.S. Fish and Wildlife Service, dated July 26, 2007, stating state there will be no effect to listed threatened or endangered species or critical habitat.

Statutory Checklist

For each listed statute, executive order or regulation, record the determinations made. Note reviews and consultations completed as well as any applicable permits or approvals obtained. Attach evidence that all required actions have been taken. Record any conditions or mitigation measures required. Then, make a determination of compliance or consistency.

Factors	Determinations and Compliance Documentation
Historic Preservation [36 CFR 800]	The project site was completely transformed through mass grading and the development of an industrial subdivision and is now completely urbanized. No archaeological resources or traditional cultural properties appear to be present on or near the project site, and there is no evidence of any traditional gathering uses or other cultural practices. In conformance with Section 106 of the National Historic Preservation Act, letter consultation was undertaken with the Office of Hawaiian Affairs (OHA) (Honolulu and West Hawai‘i offices), the State Historic Preservation Division, and the Kona Hawaiian Civic Club. OHA-Honolulu responded but did not have any specific comments related to cultural properties or practices. No groups or agencies provided any information relative to the existence of traditional cultural properties in the immediate vicinity of the current project area; nor did they provide any information indicating current use of the area for traditional and customary practices. The State Historic Preservation Officer (SHPO) was contacted by letter on May 31, 2007, by Ron Terry, acting as an agent of the U.S. Department of Housing and Urban Development (HUD), and asked for concurrence with the finding of no effect to historic properties. As of December 2008, no response has been received from the SHPO, which has been supplied a copy of this EA and another opportunity to comment
Floodplain Management [24 CFR 55, Exec. Ord. 11988]	The site is not located within a floodplain, and is classified on Flood Insurance Rate Maps as within Zone X, outside of the 500-year floodplain.
Wetlands Protection [Exec. Ord. 11990]	Field inspection by Geometrician Associates in May 2007 and consultation of USFWS system wetlands maps indicate that no wetlands or other waters of the U.S., including streams, pools, springs, are present. The Corps of Engineers was contacted by letter in May 2007.
Coastal Zone Management Act [Sections 307 (c), (d)]	The project site is separated from coastal waters at Kailua Bay by 2,000 feet of industrial and/or resort development and it is not within the Special Management Area of the Hawai‘i Coastal Zone. The project will not affect threatened or endangered species and their habitat, affect or alter the flow of streams, affect historic properties, or impact or affect a wetland. The State CZM program stated in a letter of June 24, 2004, that CZM no longer reviews HUD assistance programs and that applicants are no longer required to obtain CZM federal consistency approval for HUD assisted activities (Exhibit E, CZM material; Exhibit A1, portion of: U.S. Geological Survey Map, 1:24,000 series: *Kailua*]

Sole Source Aquifers [40 CFR 149]	The project is not located in a U.S. Environmental Protection Agency-designated sole source aquifer area [Exhibit F: EPA map of Designated Sole Source Aquifers in Hawai‘i].
Endangered Species Act [50 CFR 402]	The area is completely urbanized and developed, and vegetation on the project site and adjacent areas is either landscaped ornamentals or weeds. No habitat for native animal species is present. In terms of conservation value, no biological resources requiring special protection are present. In response to early consultation, the U.S. Fish and Wildlife Service stated that to the best of its knowledge, no listed or proposed threatened or endangered species, or designated or proposed critical habitat, are present (see letter of July 6, 2007, Exhibit G). The agency also stated that it had determined that the project, as proposed, will not result in the take of any listed species or adverse modification of any critical habitat.
Wild and Scenic Rivers Act [Sections 7 (b), (c)]	Hawai‘i has no Wild and Scenic Rivers named in the National Park Service “National Wild and Scenic Rivers System” listing [Exhibit C].
Air Quality [Clean Air Act, Sections 176 (c) and (d), and 40 CFR 6, 51, 93]	The air quality of the subject area is not greatly affected by man-made air pollutants. In general, the ambient air quality of the project area meets all Federal and State standards as evidenced by its designation as an “attainment area” by the Environmental Protection Agency and the State Department of Health, Clean Air Branch. Local air quality impacts from short-term construction dust and long-term automotive emissions will occur but will not be substantial (Exhibit D, EPA List of States).
Farmland Protection Policy Act [7 CFR 658]	Consultation of maps on file at the U.S. Natural Resources Conservation Service offices in Hilo, Hawai‘i, indicate that the area is classified as Urban and that no Prime, Unique or Other Important Agricultural lands are present on the site, and the project would not adversely impact farmland or farming in any way.
Environmental Justice [Executive Order 12898]	The project will provide critically needed emergency housing facilities for the homeless population, of whom the large majority live below poverty levels and half of whom are Native Hawaiian. Although the area supports commercial and light industrial uses, with proper attention to remediation of minor recognized environmental conditions on the site, it will be suitable for the proposed use. Project proponents do not foresee any adverse health or environmental conditions that would disproportionately affect minority or low-income persons in comparison to the rest of the population.

Noise Abatement and Control [24 CFR 51 B]	The components of the project that would produce noise are associated with construction. By law, all construction projects in Hawai‘i must comply with the Administrative Rules of the Department of Health, Chapter 11-46, on “Community Noise Control”. If appropriate, a Construction Noise Permit will be obtained, which will specify measures to minimize noise impacts such as the use of mufflers and implementing construction curfew periods. Although the area supports commercial and light industrial uses, no major sources of noise such as heavy industrial activity, airports, and major highways are present. Noise is not reported to be a significant problem at the Friendly Place, which is utilized in the day when the adjacent businesses are operating. Nighttime noise levels will be substantially lower and there are not expected to be noise problems for occupants of the housing, which will be air conditioned, further blocking out sound.
Toxic or Hazardous substances and Radioactive Materials [HUD Notice 79-33]	Phase I and Phase II Environmental Site Assessments were conducted, which involved field inspection and search of federal and State databases [Exhibit B, Appendices 2a and 2b]. The only “recognized environmental conditions” were several 55-gallon drums and the petroleum odor in the northwest corner of the site. Aside from this, no USTs or any potential offsite contamination sources are present. It is recommended that no further investigation or remediation is needed for the portion of the property planned for the facility, and that the emergency housing facility can proceed as planned with concurrence from the Hawai‘i State Department of Health, which has been supplied a copy of the Phase II ESA as well as this EA for comment. This recommendation is made based on the following observations and conditions: • The free petroleum product observed in DU B will be cleaned up. • Any further investigation or clean-up of the TPH in DU A soil can continue and will not be hindered by the redevelopment plan for the western half of the property. • Grading and vegetation of areas will aerate the soil and increase biological activity, accelerating natural attenuation of TPH. • TPH-O does not pose a vapor intrusion concern to the proposed building. • Redevelopment of the site will reduce exposure to contaminants by placing a building and paved parking area over much of the site.

Siting of HUD-Assisted Projects near Hazardous Operations [24 CFR 51 C]	Visual inspection of the site determined that there were no Above-Ground Storage Tanks (ASTs) visible within the line of sight of the properties. [Exhibit B, App. 2a]
Airport Clear Zones and Accident Potential Zones [24 CFR 51 D]	The project site is outside the Clear Zone of all airports. The nearest commercial or general aviation airport is Kona International Airport, which is approximately six miles away.

Environmental Assessment Checklist

Evaluate the significance of the effects of the proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation to support the finding. Then enter the appropriate impact code from the following list to make a finding of impact. Impact codes: (1) – No impact anticipated; (2) – Potentially beneficial; (3) – Potentially adverse; (4) – Requires mitigation; (5) – Requires project modification. Note names, dates of contact, telephone numbers and page references. Attach additional materials as needed.

Land Development	**Code**	**Determinations and Documentation**
Conformance with Comprehensive Plans and Zoning	1	According to communication from the Hawai‘i County Planning Department, the proposed emergency housing development is not inconsistent with all State and local plans [Exhibit B, Appendix 1a].
Compatibility and Urban Impact	2	The project will provide badly-needed infrastructure for the homeless in an urban area.
Slope	1	Slopes are low and will not affect or be affected by construction.
Erosion	4	Erosion hazard is very slight on this already developed surface. In conformance with County and State regulations, a Stormwater Pollution Prevention Plan will be implemented as part of building permits to ensure that the proposed facility does not cause erosion, drainage or water quality impacts. Best Management Practices (BMPs) such as standard soil erosion and sediment control shall be implemented construction.
Soil Suitability	1	The soil in the project area suitable for construction and the area has been used for structures in the past with no remediation required.

Hazards and Nuisances including Site Safety	1	Aside from conditions noted in the Phase I/II Environmental Site Assessments that may require some remediation, no hazards to occupants of the emergency housing are known to exist on the property [Exhibit. B, App. 2a and 2b].
Energy Consumption	1	The proposed project will not require substantial energy consumption.
Noise – Contribution to Community Noise Levels	1	Temporary noise impacts will occur from construction activities of the proposed project and are unavoidable. However, no adverse effects to sensitive uses are expected. All construction activities in Hawai‘i must comply with the Administrative Rules of the Department of Health, Chapter 11-46, on “Community Noise Control”, and the Department of Health will review project activities to determine if mitigation measures are warranted.
Air Quality Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	4	Short-term impacts will result from construction activity, including dust and exhaust from machinery involved in the construction of the proposed subdivision. The contractor will be instructed to utilize best management practices to minimize dust impact and comply with provisions of Hawai‘i Administrative Rules, Chapter 11-60.1, “Air Pollution Control,” and Section 11-60.1-33, Fugitive Dust. The ambient air quality of the project area meets all federal and State standards as evidenced by its designation as an “attainment” area by the Environmental Protection Agency and the State Department of Health, Clean Air Branch. Long-term impacts will be extremely minor, derived mainly from motor vehicles visiting the site as part of maintenance and social services and impacts associated with electricity production, goods and services consumed, and solid waste disposal.
Environmental Design Visual Quality – Coherence, Diversity, Compatible Use and Scale	1	The proposed use would provide a facility that is compatible with the heterogeneous uses and designs in the mixed-use Old Kailua Industrial Area.

Socioeconomic	Code	Determinations and Documentation
Demographic Character Changes	1	No changes to the demographic character of the area or region would occur.
Displacement	1	The property is currently vacant, and no displacement will occur.
Employment and Income Patterns	1	No effect to employment and income patterns would occur. A number of private and public places of employment are located within walking distance, which is one of the factors that makes the location suitable for an emergency housing facility for the homeless.
Community Facilities and Services	**Code**	**Determinations and Documentation**
Educational Facilities	1	The emergency housing may facilitate the ability of adults to attend adult education and college classes. Given the small size of the facility, no effect on educational facilities would occur.
Commercial Facilities	1	Diverse commercial facilities are present within walking distance, which is one of the factors that makes the location suitable for an emergency housing facility for the homeless.
Health Care	1	The closest hospital is located in Kealakekua, about 8 miles away. Medical services and mental health facilities are present in Kailua-Kona, within walking distance or easily accessible using social service provider transportation.
Social Services	1	Full social services are available in Kailua, within walking distance or easily accessible using social service provider transportation.
Solid Waste	1	Private vendors will offer garbage pickup, and the facility will offer recycling. The West Hawai‘i Sanitary Landfill in Pu‘uanahulu has sufficient capacity to accept project-related solid waste till at least 2040, by which time alternative waste strategies are expected to have been developed.
Waste Water	1	The project is served by sewer lines, and a municipal wastewater treatment plant with sufficient capacity to treat all project wastewater is present nearby in Kealakehe.
Storm Water	1	During construction, a Stormwater Pollution Prevention Plan will be implemented to ensure proposed improvements do not cause erosion, drainage or water quality impacts. BMPs (Best Management Practices) for soil erosion and sediment control shall be implemented, and drainage impacts will be minor.

Community Facilities and Services	Code	Determinations and Documentation
Water Supply	1	The facility has adequate water supply and infrastructure. Water is supplied to the area by the Hawai‘i County Department of Water Supply via an 8-inch water main on Pawai Place.
Public Safety - Police	1	A police substation is located in Kealakehe, about 1.5 miles away.
- Fire	1	A fire station is located on Palani Road, less than one mile away.
- Emergency Medical	1	EMT services are provided by the Hawai‘i County Fire Department, which has a Kailua-Kona station. Acute care services are available at Kona Hospital, approximately 8 miles away.
Open Space and Recreation - Open Space	1	Open space is found in nearby State and County parks.
- Recreation	1	Recreational facilities within walking distance area include a shoreline park, an Olympic swimming pool, ballfields and a community center, all available to use free of charge.
- Cultural Facilities	1	Numerous cultural facilities including museums, historic sites, and community centers are present in Kailua-Kona.
Transportation	1	The proposed facility would have minimal impact on traffic. Traffic at the facility will be minimal and mostly associated with staff and occasional visits by maintenance and social service agencies, as most of the clients do not own cars. The facility will be staffed with two persons in the daytime, two during swing shift, and one during the midnight shift. It will be visited in the mornings by social service providers including a mental health case manager and various other health workers, with no more than 20 visits during a typical week. Total traffic in and out of the facility would probably be less than 20 cars per day, leading to negligible impact on traffic.
Natural Features		**Determinations and Documentation**
Water Resources	1	The project site has no sensitive water resources such as streams, wetlands, anchialine pools, or coastal waters. Measures to intercept and inject drainage water, to treat wastewater, and to utilize well water that has been developed in conformance with State aquifer protection programs will ensure that no adverse impacts to water resources will occur.

Surface Water	1	No surface water bodies are located close to the project site. The nearest coastal waters are situated approximately 2,000 feet west of the project site. The proposed project is not expected to have any direct impact on any streams or marine waters.
Unique Natural Features and Agricultural Lands	1	No unique natural features are present. The area is completely urbanized, and no Prime, Unique or Other Important Agricultural lands are present on the site.
Vegetation and Wildlife	1	Field inspection and Section 7 consultation determined that there would be no impact to vegetation or wildlife as a result of the proposed project. [Exhibit G]

Other Factors		**Determinations and Documentation**
Tsunami Evacuation Zone	1	The project site is 2,000 feet from the coast at over 45 feet in elevation and is not located in the Tsunami Evacuation Zone.
Lava Flow Hazard Zone	1	The project is located in Lava Flow Hazard Zone 4 (Exhibit B, Sect. 3.1). There is only modest risk of lava inundation over short time scales.
Seismic Risk	1	The entire island of Hawai‘i is rated Zone 4 Seismic Probability Rating: areas at risk from major earthquake damage, especially to structures that are poorly designed or built, as demonstrated by the earthquake of October 15, 2006, which had a 6.7 magnitude. All construction will conform with appropriate building codes. [Source: *Uniform Building Code, 1997 Edition*, Figure 16-2]

SUMMARY OF FINDINGS AND CONCLUSIONS

There are no jurisdictional wetlands, riparian habitats, or streams, water bodies or critical aquifer systems on or near the property. Site inspection and coordination with the State Historic Preservation Officer, the Office of Hawaiian Affairs, and various private cultural groups indicates that there are no significant historic, cultural and archaeological sites. The U.S. Fish and Wildlife Service has confirmed that no listed threatened or endangered species or critical habitat are present on and near the area to be affected. No conditions were observed or identified during a Phase I Environmental Site Assessment (ESA) that indicate underground or aboveground storage tanks, and there are there are no explosive or flammable hazards. However, recognized environmental conditions including several 55-gallon drums and the petroleum odor in the northwest corner of the site were noted. With the remediation proposed in the Phase II ESA, to which the County of Hawai‘i is committed, no hazard during construction or occupation of the facility is expected. The nature and scale of the proposed action is such that no significant environmental effects are anticipated, given diligent implementation of mitigation. Potential impacts, if any, can be mitigated through careful construction management practices and compliance with all governmental requirements including those of the State Department of Health and the County Planning Department. As such, a determination of a Finding of No Significant Impact for the proposed action is appropriate.

ALTERNATIVES TO THE PROPOSED ACTION

Alternatives and Project Modifications Considered

The Community Alliance Partners (CAP) has been investigating sites in the Kailua-Kona area for many years. The use requires a location close to urban centers because of the clients' need to walk to jobs, medical offices and social service facilities. Homeless housing is generally considered an undesirable land use by neighbors, and proposals to develop facilities near residential neighborhoods, schools, parks, or resorts are often vigorously opposed. The location within a designated mixed industrial and commercial zone, while not ideal, avoids some of these problems. The Community Alliance Partners group recognizes that the facility will have some impact on neighboring businesses and pledges to continue to work to minimize these impacts, but in all its searching has not been able to identify a more suitable site that is available for use.

No Action Alternative

Under the No Action Alternative, the facility would not be constructed, and the many dozens of homeless individuals in West Hawai‘i would continue to lack emergency housing and the services that could assist some of them to transition back to a better life. Service providers emphasize the importance of emergency housing in breaking the downward spiral of street life, substance abuse, and mental health problems. Because homelessness is an acute problem in West Hawai‘i, the Office of Housing and Community Development considers the No Action Alternative highly undesirable.

MITIGATION MEASURES RECOMMENDED

Short-term impacts will result from the proposed construction activity including the potential for increased erosion, sedimentation, noise, dust and machinery exhaust. Best management practices for construction-period impacts will be determined in consultation with the Department of Health and formulated as part of a Pollution Control Plan, a Stormwater Pollution Prevention Plan, and a Dust Control Plan. The contractor will be instructed to comply with provisions of Hawai‘i Administrative Rules, Chapter 11-60.1, “Air Pollution Control,” Section 11-60.1-33, “Fugitive Dust”, and Chapter 10, “Erosion and Sedimentation Control,” of the Hawai‘i County Code. All project activities must comply with the Administrative Rules of the Department of Health, Chapter 11-46, on “Community Noise Control”. If appropriate, a Construction Noise Permit will be obtained, which will specify measures to minimize noise impacts such as the use of mufflers and implementing construction curfew periods. The remediation specified in the Phase II Environmental Site Assessment (see Exhibit B, Appendix 2b) will be required as part of the development.

Additional Studies Performed:

Phase I Environmental Site Assessment– (Mounghee Noh and Associates – August 2007 – Exhibit B, Appendix 2a)
Phase II Environmental Site Assessment– (Myounghee Noh and Associates – October 2008 – Exhibit B, Appendix 1b)

List of Sources, Agencies and Persons Consulted

Patrick Leonard, Field Supervisor
Pacific Island Ecoregion
U.S. Fish and Wildlife Service
300 Ala Moana Boulevard
Honolulu HI 96813

Melanie Chinen, Administrator
State Historic Preservation Division
Hawai‘i Department of Land and Natural Resources
601 Kamokila Blvd., Room 555
Kapolei HI 96707

Laurence K. Lau, Deputy Director,
Env. Heal. Admin.
Hawai‘i State Dept. of Health
P.O. Box 3378
Honolulu HI 96801-3378

George P. Young, P.E.
Chief, Regulatory Branch
U.S. Army Engineer District,
Ft. Shafter, HI 96858-5440

Christopher J. Yuen, Director
Hawai‘i County Planning Department
101 Aupuni Street, Suite 3
Hilo HI 96720
Ruby McDonald

Clyde Nāmu‘o, Administrator
Office of Hawaiian Affairs
711 Kapiolani Blvd., Suite 1250
Honolulu HI 96813

Angel Pilago, Councilmember
Hawai‘i County Council
25 Aupuni Street
Hilo HI 96720

Office of Hawaiian Affairs
75-5706 Hanama Place, Ste. 107
Kailua-Kona HI 96740

Kona Hawaiian Civic Club
75-5815 Mamalahoa Highway
Holualoa HI 96725

Bruce McClure, Director
Hawai‘i Cty. Dept. Public Works
101 Pauahi Street Hilo HI 96720

Vivian Landrum
Executive Director
Kona-Kohala Chamber of Commerce
75-5737 Kuakini Hwy. Suite #208,
Kailua-Kona, HI 96740

Surrounding business owners

REFERENCES

American Society for Testing and Materials (ASTM). 1997. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment, E-1527*. Washington.

FEMA, 2005, *Flood Zone Mapping,* http://www.fema.gov/fhm/fq_term.shtm.

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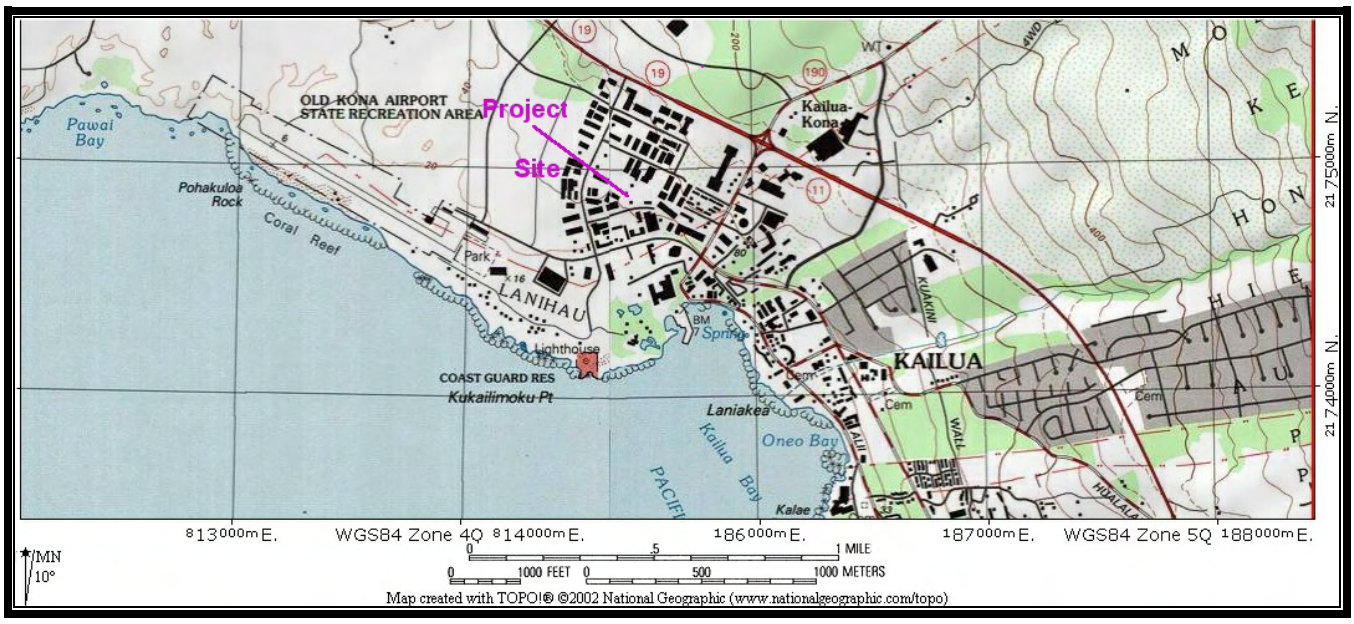
University of Hawai'i at Manoa, Dept. of Geography. 1983. *Atlas of Hawai'i.* 2nd ed. Honolulu: University of Hawai'i Press.

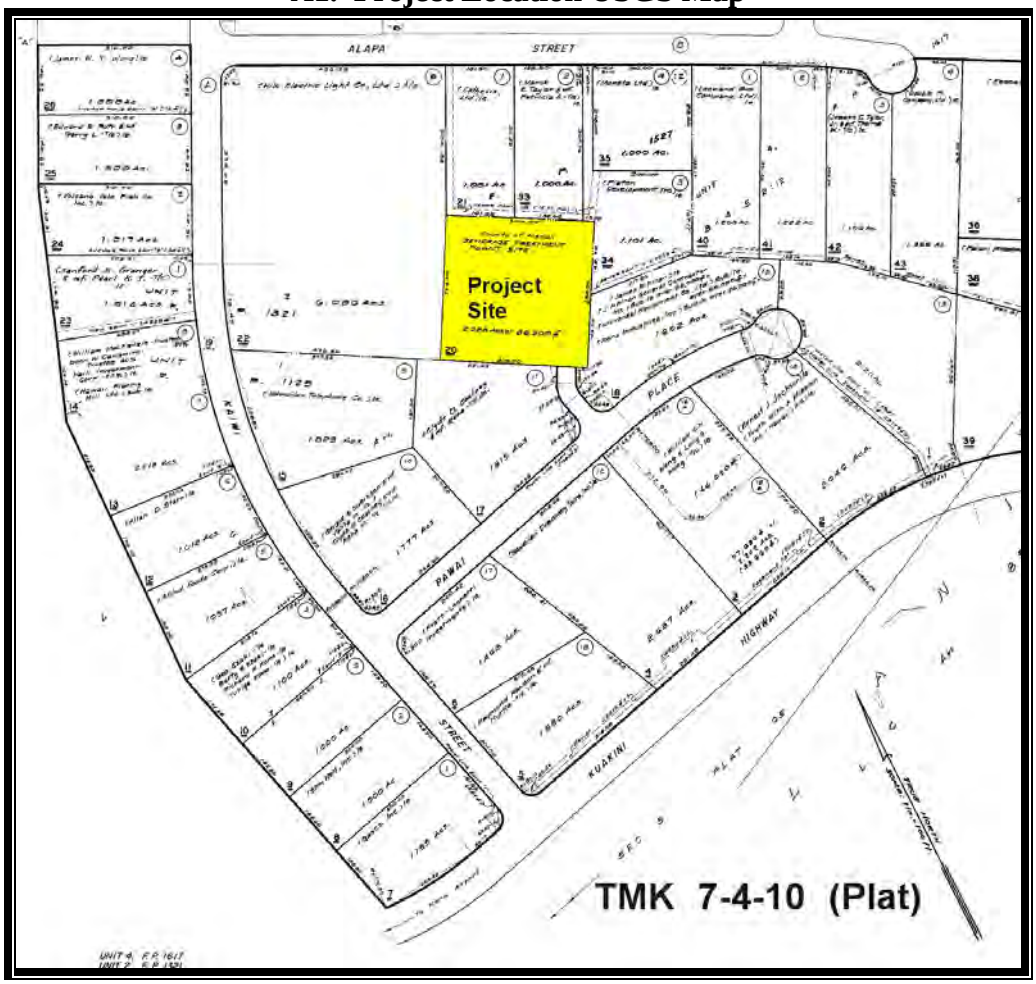
U.S. Fish and Wildlife Service (USFWS). 2007. *USFWS Threatened and Endangered Species System (TESS).* Washington: GPO. http://ecos.fws.gov/tess_public/StartTESS.do.

Wolfe, E.W., and J. Morris. 1996. *Geologic Map of the Island of Hawai'i.* USGS Misc. Investigations Series Map i-2524-A. Washington, D.C.: U.S. Geological Survey.

Environmental Assessment, West Hawai‘i Emergency Housing
Exhibit A Maps, Photos and Plans



A1. Project Location USGS Map

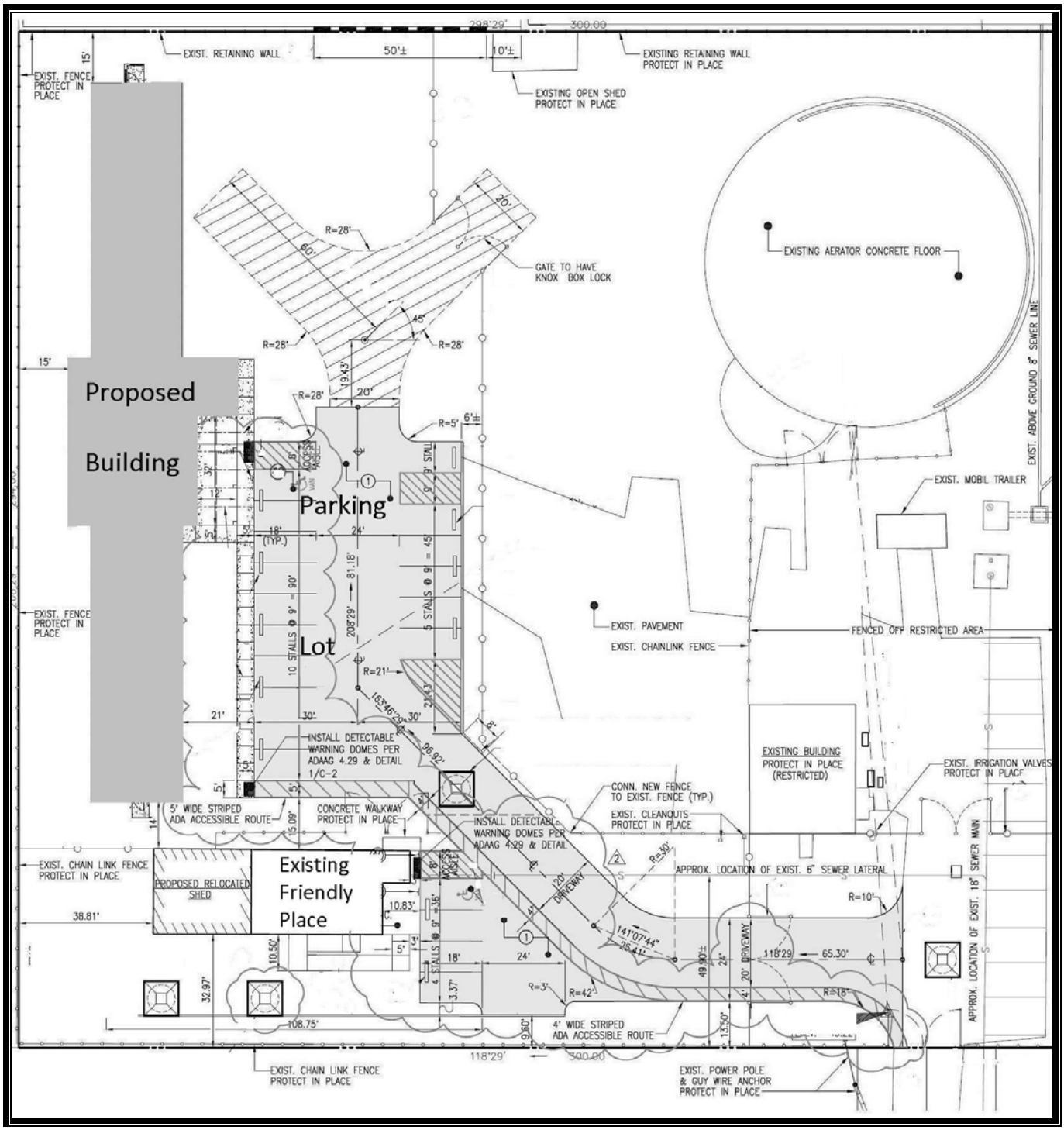


A2. TMK Map

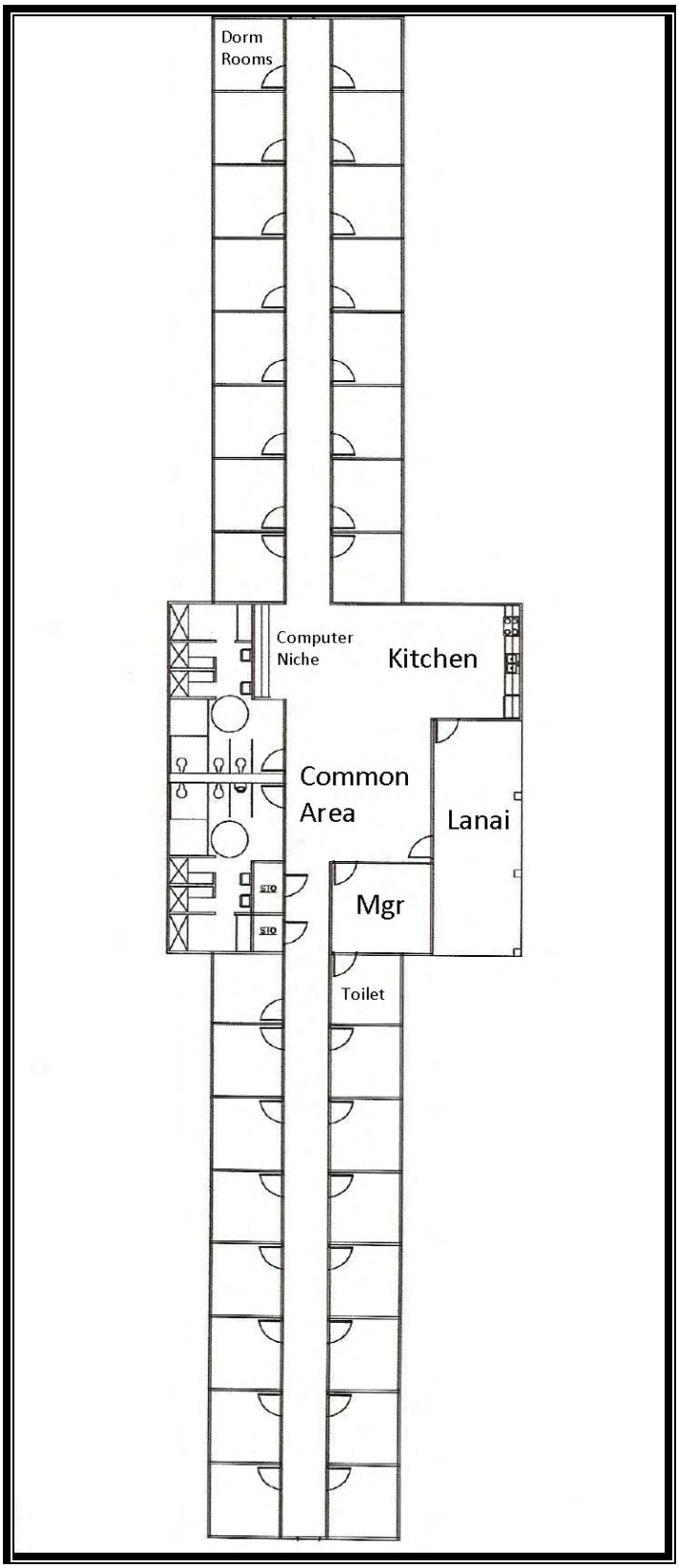
A3. The Friendly Place

A4. Portion of Site of Proposed Emergency Housing Facility

A5. Airphoto of Project Site (from Microsoft Virtual Earth ©)



A6. Site Plan (Conceptual)



A7. Floor Plan (Conceptual)

Exhibit B
State of Hawai‘i Environmental Assessment
(Under Separate Cover)

EXHIBIT C

From: http://www.rivers.gov/wildriverslist.html, National Wild and Scenic Rivers System

Wild & Scenic Rivers By State

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware / Pennsylvania
- Florida
- Georgia / North & South Carolina
- Idaho
- Idaho / Oregon
- Illinois
- Kentucky
- Louisiana
- Maine
- Massachusetts
- Michigan
- Minnesota / Wisconsin
- Mississippi
- Missouri
- Montana
- Nebraska
- Nebraska / South Dakota
- New Hampshire
- New Jersey
- New Jersey / Pennsylvania
- New Mexico
- New York / Pennsylvania
- North Carolina
- Ohio
- Oregon
- Pennsylvania
- Puerto Rico
- Tennessee
- Texas
- Washington
- West Virginia
- Wisconsin
- Wyoming

EXHIBIT D

Green Book

http://www.epa.gov/oar/oaqps/greenbk/astate.html
Last updated on Tuesday, June 3rd, 2008.

Select a State

ALABAMA
ALASKA
ARIZONA
ARKANSAS
CALIFORNIA
COLORADO
CONNECTICUT
DELAWARE
DISTRICT OF COLUMBIA
GEORGIA
GUAM
IDAHO
ILLINOIS
INDIANA
KENTUCKY
LOUISIANA
MARYLAND
MASSACHUSETTS
MICHIGAN
MISSOURI
MONTANA
NEVADA
NEW HAMPSHIRE
NEW JERSEY
NEW MEXICO
NEW YORK
NORTH CAROLINA
OHIO
OREGON
PENNSYLVANIA
PUERTO RICO
RHODE ISLAND
SOUTH CAROLINA
TENNESSEE
TEXAS
UTAH
VIRGINIA
WEST VIRGINIA
WISCONSIN
WYOMING

Exhibit E
CZM Consistency Material

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GOVERNOR
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DIRECTOR
STEVE BRETSCHNEIDER
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MARY LOU KOBAYASHI
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Fax: (808) 587-2824

Ref. No. P-10520

June 24, 2004

Mr. Gordan Y. Furutani, Field Office Director
U.S. Department of Housing and Urban Development
Hawaii State Field Office
500 Ala Moana Boulevard, Suite 3A
Honolulu, Hawaii 96813

Dear Mr. Furutani:

Subject: Hawaii Coastal Zone Management (CZM) Program Federal Consistency Requirements for U.S. Department of Housing and Urban Development (HUD) Grant Programs

We have recently revised the Hawaii CZM Program list of federal assistance programs that require CZM federal consistency review by our office. We no longer review any HUD assistance programs, including Community Development Block Grants, and housing programs such as the Public Housing Capital Fund. Applicants for HUD assistance are no longer required to obtain CZM federal consistency approval for HUD assisted activities. Other CZM regulations such as the Special Management Area and Shoreline Setback provisions which are administered by the Counties, are still valid and may apply to HUD assisted projects. Each County Planning Department should be consulted for the applicability of Special Management Area and Shoreline Setback Area requirements. We suggest that the environmental checklist that applicants for HUD assistance must complete be modified to reflect the change in CZM requirements.

Thank you for your cooperation in ensuring compliance with Hawaii's CZM Program. If you have any questions, please contact John Nakagawa at 587-2878 or Debra Tom at 587-2840, of our CZM Program.

Sincerely,

Mary Lou Kobayashi

Mary Lou Kobayashi
Administrator

EXHIBIT F

United States Environmental Protection Agency
Region 9 Ground Water Office (WTR-9)
JUNE 2000

Sole Source Aquifer Designations in EPA, Region 9

The U.S. EPA's Sole Source Aquifer Program was established under Section 1424(e) of the U.S. Safe Drinking Water Act (SDWA.) Since 1977, it has been used by communities to help prevent contamination of groundwater from federally-funded projects. It has increased public awareness of the vulnerability of groundwater resources.

How did this program start? SDWA regulations implementing the sole source aquifer statute were first proposed in 1977 for the Edwards Underground Reservoir in San Antonio, Texas. These regulations guided U.S. EPA in the subsequent designation of 64 sole source aquifers across the United States.

What does the Sole Source Aquifer Program do? The Sole Source Aquifer program allows for EPA environmental review of any project which is financially assisted by federal grants or federal loan guarantees. These projects are evaluated to determine whether they have the potential to contaminate a sole source aquifer. If there is such a potential, the project should be modified to reduce or eliminate the risk, or federal financial support may be withdrawn. This doesn't mean that the Sole Source Aquifer program can delay or stop development of landfills, roads, publicly owned wastewater treatment works or other facilities. Nor can it impact any direct federal environmental regulatory or remedial programs, such as permit decisions.

The Sole Source Aquifer Program's review authority extends only to projects funded with **federal assistance** that are to be implemented in designated sole source aquifer areas. (For regulations applicable to new private development, you should consult with your local, county or state environmental health agency.)

Typical projects reviewed by the U.S. EPA include housing projects undertaken by Housing and Urban Development, and highway construction and expansion projects undertaken by the Federal Highway Administration. In 1991, the U.S. EPA reviewed 152 federal assistance projects totaling $571 million; of these projects, 25 had to be modified to prevent contamination of sole source aquifers. Modifications included the redesign of bridges and highways to prevent spills of hazardous materials.

How do you designate an aquifer as a "Sole Source" Aquifer? As the name implies, only a "sole source" aquifer can qualify for the program. To be a sole source, the aquifer must supply more than 50% of a community's drinking water. Any individual, corporation, association, or federal, state or local agency may petition the U.S. EPA for sole source aquifer designation, provided the petition includes sufficient hydrogeologic information. An outline describing how such petitions should be prepared is contained in *The Sole Source Aquifer Designation Petitioner Guidance*, copies of which are available at EPA Regional offices (see contact information below.)

What about Boundaries? Determination of sole source aquifer boundaries is a difficult aspect of the designation process since the "designated area includes the surface area above the aquifer and its recharge area." Thus, some sole source aquifers extend across state boundaries. The 10,000 square-mile Eastern Snake River Aquifer, for example, includes portions of Idaho, Nevada, Utah, and Wyoming.

In Region 9: nine sole source aquifers have been designated in the following areas as shown on the map: Upper Santa Cruz and Avra Basin Aquifer, covering parts of Pima, Pinal, and Santa Cruz Counties, Arizona; Naco-Bisbee Aquifer, Arizona; Ocotillo-Coyote Wells, Imperial County, California; Fresno Aquifer, California; Scotts Valley Aquifer, Santa Cruz County, California; Campo-Cottonwood Aquifer, San Diego County, California; Northern Guam Aquifer, Guam; Southern Oahu Aquifer, Hawaii; and Molokai Aquifer, Hawaii.

Region 9 SSA maps are on the web at www.epa.gov/safewater/ssanp.html. For more information about SSA designation and project reviews, please call David Albright, manager of the Ground Water Office, at (415) 972-3971 or email albright.david@epa.gov.

Exhibit G
U.S. Fish and Wildlife Service Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

In Reply Refer To:
2007-I-0197

JUL 6 2007

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, Hawaii 96721

Subject: West Hawaii Homeless Facility, Kailua-Kona, Island of Hawaii

Dear Mr. Terry:

Thank you for your May 31, 2007, letter requesting concurrence that the West Hawaii Homeless Facility, Kailua-Kona, Island of Hawaii (proposed project) is not likely to adversely affect threatened or endangered species or their critical habitat. We received your letter on June 4, 2007. In your letter you did not indicate if the Federal action agency (U.S. Department of Housing and Urban Development) had delegated its authority to you for informal consultation under section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), as amended. Therefore, we have reviewed this project in terms of providing technical assistance directly to you regarding whether or not the proposed project will result in "take" of federally listed species.

The proposed project involves constructing a new dormitory style building on a 2-acre County property on Pawai Place in Kailua's old industrial area. The property was formerly a wastewater treatment baseyard and is completely developed and urbanized.

We reviewed species distribution and critical habitat designations from our files and determined that the federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) (bat) is known from the general area of the proposed project. Take of the bat is not expected because the work will be conducted on an urbanized parcel and existing lighting ordinances should reduce attraction of the bat to the project area. Therefore, we have determined that the project, as proposed, will not result in take of the bat or any other listed species. No critical habitat is present within the proposed project area; therefore, none will be adversely modified or destroyed.

We appreciate the opportunity to review the proposed project. If you have questions regarding these comments, please contact Fish and Wildlife Biologist, Holly Herod, at 808-792-9400.

Sincerely,

for Patrick Leonard
Field Supervisor