April 25, 2006

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

Dear Ms. Salmonson:

Subject: Finding of No Significant Impact (FONSI) for
Plantation Town Apartments
TMK: 9-4-017: portion 058
Waipahu, Oahu, Hawaii

The Housing and Community Development Corporation of Hawaii has reviewed the comments received during the 30-day public comment period that began on March 8, 2006 and ended on April 7, 2006. The agency has determined that this project will not have significant environmental effects and has issued a Finding of No Significant Impact (FONSI). Please publish this notice in the next edition of the Environmental Notice.

A completed OEQC Publication Form and four copies of the Final Environmental Assessment are attached. Please call Mr. Stanley Fujimoto of my staff at 587-0541 if you have any questions.

Sincerely,

Stephanie Aveiro
Executive Director

Attachments
FINAL ENVIRONMENTAL ASSESSMENT

PLANTATION TOWN APARTMENTS
Waipahu, Ewa District, Oahu

Prepared for
Plantation Town Apartments, LLC
1133 Waimanu Street, Suite 2800
Honolulu, Hawaii 96814

April 2006
FINAL ENVIRONMENTAL ASSESSMENT

PLANTATION TOWN APARTMENTS
Waipahu, Ewa District, Oahu

Prepared in Partial Fulfillment of the Requirements of Chapter 343, Hawaii Revised Statutes and Title 11, Chapter 200, Hawaii Administrative Rules, Department of Health, State of Hawaii

Prepared for
Plantation Town Apartments, LLC
1133 Waimanu Street, Suite 2800
Honolulu, Hawaii 96814

Prepared by
Gerald Park Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814

April 2006
PROJECT PROFILE

Proposed Action: Plantation Town Apartments

Applicant: Plantation Town Apartments, LLC
1133 Waimanu Street, Suite 2800
Honolulu, Hawaii 96814

Approving Agency: Housing and Community Development Corporation of Hawaii
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

Tax Map Key: 9-4-017: Portion 058
Land Area: 7.411 acres
Project Site: Approximately 6.0 acres
Owner: State of Hawaii

Existing Use: Vacant

State Land Use Designation: Urban
Development Plan Area: Central Oahu
Development Plan Land Use Map: Residential
Public Facilities Map: Urban Area

Special District: None
Zoning: R-5 Residential
Special Management Area: Outside Special Management Area

Need for Assessment: Propose the Use of State Land Section 11-200-6 (b)(1)(A)
Hawaii Administrative Rules

Determination: Finding of No Significant Impact

Contact Person: Michael Kimura
Plantation Town Apartments, LLC
1133 Waimanu Street, Suite 2800
Honolulu, Hawaii 96814

Telephone: 592-0440

Note: Substantive revisions to the Draft Environmental Assessment are in bold italic type. Deleted text is [bracketed].
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DESCRIPTION OF THE PROPOSED PROJECT

Plantation Town Apartments, LLC proposes to develop a multi-family affordable residential housing project on State land situated in the town of Waipahu. The development would be part of the Kau'olū Project, a 22.5-acre mixed-use development of the State of Hawaii.

The parcel (alternatively property or project site) is bordered by Paiwa Street and single-family residences to the north, Wailani Stream Channel and Waipahu District Park to the east, Kau'olū Place and the Kamalu and Ho'olulu Elderly Housing Projects to the south, and single-family residences to the west.

The project site is identified as tax map key 9-4-017: 058. Although the lot has an area of 7.411 acres, approximately 6.0 acres have been set aside for the proposed project. A Location Map and Tax Map are shown in Figures 1 and 2.

A. Purpose and Need for the Project

The purpose of the project is to provide the maximum number of affordable housing units using the least amount of State resources (Housing and Community Development Corporation of Hawaii, Request for Proposal).

Since 1992, government sponsored affordable housing construction has resulted in the construction of approximately 2,000 units (Honolulu Advertiser, 2006). Construction of affordable housing waned as builders concentrated their efforts on market priced residential housing. Future construction of affordable housing also does not appear to be a priority at this time. Data@Work (2005) tabulated 18 future condominium developments on Oahu either under construction or in the active planning process. These projects would deliver approximately 4,740 new units by the year 2009. All are market units priced from a low of $575,000 to a high of $1.75 million. Two of the projects are planned for West Oahu in the Ko Olina Resort. Plantation Town Apartments is not one of the projects identified by Data@Work but it is one of two currently planned multi-family projects in West Oahu that proposes to deliver housing at affordable prices.

B. Technical Characteristics

1. Development Concept

The vacant parcel is the largest remaining undeveloped lot in the Kau'olū Project. The surrounding area has been developed for a variety of housing types, civic, and educational facilities (See Section 2, Existing Uses). This parcel has been master planned for multi-family residential housing (Paul Louie & Associates, 1990, 1992) but its development has been hampered in part by soft underlying soil conditions. After 25+ years of surcharging the site (using the weight of material spread over the site to induce compressing the underlying soft soils) the ground is considered suitable for development.

The western and northern portion of the parcel, where the ground is most stable, is proposed for structural improvements. Ground conditions on the eastern and southern portion are not as suitable and proposed for non-structural uses.
2. Building Placement

Two 12-story rectangular shaped buildings (197'L X 57'W) will be sited on the western half of the site parallel with the property line. Each building features a footprint of approximately 9,643 square feet with a total floor area of 115,543 square feet.

Both structures will be setback 50 feet from the property line instead of 15 feet required by the Land Use Ordinance. A Site Plan and Exterior Elevations are shown in Figures 3 and 4.

The buildings exceed the 25 to 30 foot height limit for the R-5 residential zoning district. When the Kamalu and Ho'olulu elderly housing projects were built, the Housing Finance Development Corporation Board, using the powers of Act 15, overrode County zoning to allow buildings to be built up to 80-feet in height. The Board also established a height of 60-feet for the subject property. Under the provisions of Chapter 201G HRS, Applicant will be requesting a height exemption to allow both buildings to reach a height of 104'9" measured from finish grade and to allow the buildings to encroach into the residential height setback.

3. Dwelling Units

One hundred sixty five (165) residential units are planned for each structure. The units are a mix of junior one-bedroom, one bedroom, two bedroom, and three bedroom units as shown in Table 1. Except for the ground floor, there are 14 units per floor and each floor has a total floor area of approximately 9,643 square feet. Sixteen ADA accessible units are included in the total unit count.

All units will be sold in fee at affordable prices. The target market is a household earning 80% to 120% of the State of Hawaii's median income that can qualify for a residential mortgage.

<table>
<thead>
<tr>
<th>Number of Units</th>
<th>Bedrooms</th>
<th>Bathrooms</th>
<th>Square Feet</th>
<th>Price ($2006)</th>
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<tbody>
<tr>
<td>48</td>
<td>Jr. One BR</td>
<td>1</td>
<td>418</td>
<td>134,000</td>
</tr>
<tr>
<td>92</td>
<td>One</td>
<td>1</td>
<td>509</td>
<td>190,000</td>
</tr>
<tr>
<td>146</td>
<td>Two</td>
<td>1</td>
<td>623</td>
<td>240,000</td>
</tr>
<tr>
<td>44</td>
<td>Three</td>
<td>1</td>
<td>724</td>
<td>295,000</td>
</tr>
</tbody>
</table>

Under the provisions of Chapter 201G HRS, Applicant will request an exemption to allow multi-family use in the R-5 Residential zoning district.

4. Parking and Access

Vehicle ingress and egress is proposed at four driveways—two on Paiwa Street and two on Kau'olou Place. Access to the Paiwa Apartments (the building nearest to Paiwa Street) will be taken from Paiwa Street. One driveway would access the gated resident parking lot and the other would access a drop off area at the building entry, visitor parking lot, and loading zone at the rear of the building. The two driveways to the Kau'olou Apartments will serve the same functional purposes as that for the Paiwa Apartments.
Uncovered, at-grade parking for 386 resident vehicles is proposed. Resident parking is arrayed on the southern and eastern half of the lot where subsurface soil conditions preclude excessive building loads. Thirty-three stalls are provided for visitors and 10 stalls for ADA accessible parking (6 resident and 2 visitor). Visitor parking and ADA parking stalls are located nearer to the buildings than resident parking.

Four loading stalls are provided as required by the Land Use Ordinance.

Based on the number of units, the Land Use Ordinance requires a minimum of 426 resident parking stalls and 33 guest stalls. Under the provisions of Chapter 201G HRS, Applicant will request an exemption to the required number of stalls.

5. Infrastructure

Water will be drawn from existing water systems within and near the Kau'olū Project. Twelve-inch water mains in Kau'olū Place and Paliwa Street can supply domestic water for the project. Water demand exclusive of irrigation is estimated at 95,000 gallons per day (Advanced Engineering Technology, 2006).

Wastewater will be discharged into an existing 24" sewer line along Wailani Stream Channel. Wastewater flow is estimated at 73,200 gallons per day (Advanced Engineering Technology, 2006).

The property will be graded to drain overland in the direction of Wailani Stream Channel. Catch basins and drain inlets will collect and discharge into an existing 30" drain line that outlets into the channel. The private park area and landscaped areas around the two buildings, in the parking lot, and adjacent to Wailani Stream Channel would be used for detaining runoff.

6. Landscaping

Landscaped areas comprise approximately 25% of the project's required open space. A combination of native Hawaiian plants and ornamentals would be used to landscape the project grounds (See Landscape Concept Plan).

The parking lot will be landscaped as required by the Land Use Ordinance.

7. Amenities

A private park of approximately 30,775 square feet, a 3,000 square feet recreation/meeting room, a lot lot, and a landscaped picnic area will be provided for residents. A portion of the property in the southern corner (approximately 5,500 square feet) has been set aside for resident use as a vegetable garden.

The project will have one resident manager. On-site security is scheduled to be provided 24 hours a day, 7 days a week. The property will be fenced and the parking area gated.

An open body of water on the northern boundary of the property will be retained as a project amenity. A description of the feature is presented in Section 2, Item 7. Assistance from the Corps of Engineers will be sought in establishing the spatial boundaries of the open body of water.
C. Economic Characteristics

1. Land Tenure

The property is owned by the State of Hawaii. The State of Hawaii will sell approximately 2.86 acres of the property to the Applicant for development of the two residential structures. The remaining 3.14 acres will be leased to the Applicant for use as parking. A Subdivision Plan to create separate lots is pending approval.

2. Construction Cost and Phasing

The estimated development budget for the project is $61.8 million and will be funded by Plantation Town Apartments LLC and participating banks.

Construction will commence in the 3rd quarter of 2006 after all necessary permits and approvals are received. Project completion is projected 16 months after start-up. Resident occupancy is expected to commence in late 2007.

D. Social Characteristics

The proposed action will not displace any business or residence.
PROJECT DATA:

SITE: 2-6-1358
LAND AREA: 6 ACRES
ZONING: RS, RD HEIGHT
PROPOSED: CONDOMINIUM BUILDING
2 BUILDINGS @ 8 STORY EACH
FLOOR AREAS:
GROUND FLOOR = 4,770SF
TOP, 8TH = 116,542SF
TOTAL = 121,312SF PER BUILDING
TOTAL FOR 2 BUILDINGS = 242,624SF
FLOOR AREA: 2,030+2,080=2,100+2,130
LOT SIZE: 1,360+1,360+1,360=3,080
MAXIMUM SETBACK PROVIDED = 30 FT
BUILDING HEIGHT = 104-107 FT

NUMBER OF UNITS:
155 UNITS PER BUILDING
310 UNITS TOTAL
ACCESSIBLE UNITS:
SEE OR 16 UNITS

PARKING:
REQUIRED: 425 + 33 VISITOR
REQUIRED (LUA) WITH LAND EXEMPTION = 352+33 VISITOR
PROVIDED = 357 + 33 VISITOR
ACCESSIBLE (LUA) REQUIRED = 16
PROVIDED = 16 ADDITIONAL 8 TO BE PROVIDED ON REQUEST
ACCESSIBLE (LUA) REQUIRED = 0% OF SS OR 1
PROVIDED = 0
LOADING PROVIDED:
TOTAL 4 REQUIRED AND PROVIDED
TYPE OF CONSTRUCTION: TYPE 1 FIRE RESISTIVE (GBC)
REINFORCED CONCRETE WALLS AND FLOOR DECKS
Landscape Concept Plan
Waipahu Affordable Housing
Scale: 1" = 30'-0" Jan. 25, 2006
0' 10' 20' 30' 50' 100'

North
DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Existing Use and Improvements

The history of Waipahu is deeply rooted in the natural resources found in the area. Native Hawaiians settled the area as fish were plentiful in nearby mudflats and shallow waters off Pearl Harbor. Natural springs issued water for agricultural activities and taro and other wetland crops were readily cultivated. The turn of the 20th century saw vast acreages of the Schofield Plateau and Ewa Plain with their rich soils committed to a more ambitious endeavor—sugar cane cultivation—which replaced fishing and subsistence farming as the agricultural and economic mainstays of the region. Today, sugar cane is no longer the major economic force in the town and the former Waipahu Sugar Mill with its landmark smokestack stands only as a memory of what was once a vibrant activity.

Located about ½ mile makai of this landmark, the State of Hawaii embarked on an ambitious mixed-use development beginning in the early 1990s. The State had acquired about 23 acres of land from the Crown Land Corporation in the mid-1970s and began preparing the land for development that was to come. The land was not entirely suitable for development because it was underlain by natural springs and soft, compressible soils. Based on soil study recommendations, the State began a program of surcharging the ground to compress the soft soils in 1975. The surcharge program continues today on the site of the proposed Plantation Town Apartments. In 1988, Mokuela and Hikimoe Streets were constructed to access the property and new infrastructure installed. In the early 1990s, the State constructed a channel to contain Wailani Stream to mitigate flooding of lands adjoining the stream. A Master Plan (Paul Louie & Associates) was prepared in 1990 for a mixed-use development. Since then, Crown property has been incrementally developed adhering to the mixed-use concept. The Waipahu Civic Center (1993), Waipahu Library (1998), the Kamalu (1993) and Ho'olulu (1994) Elderly Housing projects, Hale Kahi an independent living facility (2000), and the most recently completed project the Waipahu Adult Day Health Care and Childcare Facility (2003) are all part of this master planned property now called the Kauʻōlū Project.

B. Environmental Conditions

1. Climate

Waipahu can be characterized as having relative equable temperatures ranging from an annual average maximum of about 89°F in August to an annual average low of 65°F in January. The average temperature is 73.8°F. Average annual rainfall is approximately 25 to 30 inches, the majority of which falls in the months of February and December and the monthly average ranges from 1 to 3 inches. The northeasterly trades blow about 75 percent of the time at an average speed of about 10 knots (approximately 15 miles per hour) (Belt Collins Hawaii, 1998).

2. Topography

Prior filling, grading, and surcharging activities have created an artificial topography. The high elevation is about 15 feet above mean sea levels that occur at independent locations on the northern half of the lot and on the southern half. Between both areas, ground
elevation averages 14 feet across most of the property. Along the length of the northwest property line ground elevation averages about 12 feet. Along the Wallani Stream Channel, elevation drops from 11 feet near Paiwa Street to 8 feet in the southern corner.

In general, the contours show that the lot is highest in the center and slopes to the west and east. The low elevation on the west is relatively constant over the lot compared to ground elevation along the entire eastern boundary which falls to the south (See Images 1 and 2).

3. Soils

The Soil Conservation Service (1972) soil map (Sheet No. 63) for the area identifies one soil type—fill land (FL)—over the entire property. This soil type consists of areas filled with material dredged from the ocean or hauled from nearby areas, garbage, and general material from other sources.

Due to soft, compressible subsurface soil deposits, the State of Hawaii has engaged in an on-going surcharge program for about 25+ years. The purpose of the surcharge program is "to induce potential ground settlements anticipated from the consolidation of the soft soil deposits under the new fill and building loads (HDCCH)." For lots that have been developed, layers of surcharge have been removed to achieve design elevations. Surcharge material consisting of unconsolidated soil and rock covers an estimated 80% of the project site.

Soft compressible soils are present alongside Wallani Stream Channel (See Image 3). A 150-foot setback has been established to not induce new ground settlement and jeopardize the structural integrity of the channel walls.

A slough or drainage area transects the center of the lot in a west to east direction. Some of the heads of the sloughs found on the Kau‘olu Project lands were natural springs that were capped and drained by installed subsurface drainage systems. The head of the slough occurs as spring fed standing parallel to a portion of the west side of the lot. Water issuing from the spring indicates that the head was not capped or it is leaking. Local residents use the spring water for raising vegetables and irrigating small garden plots. The area of standing water is approximately 10 feet wide by 200 feet long. Water from the spring drains through the slough until it disappears into the ground before reaching Wallani Stream Channel.

Figure 5 depicts areas on the Kau‘olu Project property that are suitable for development. The Plantation Town Apartment structures are to be erected on the northern half of the property in the areas labeled "F" and "G (Shaded)." These locations are defined as "areas suitable for development after 3 to 4 feet of surcharge removed." The proposed parking area is identified as area "R" where "no buildings or fills in this area, reserve for roadways or open areas."

4. Flood Hazard

The project site lies within several flood hazard zones as depicted on the Flood Insurance Rate Map (FIRM) for the area (See Figure 6). The FIRM places the project site in Flood Zones AE and X. Zone AE is defined as "areas or 100-year shallow flooding where depths are between one to three feet; average depths determined". The southern portion of the project site alongside Wallani Stream Channel lies within a Floodway with a calculated flood
Image 1. Approximate Location of the "Paiwa Apartments" in the Foreground.

Image 2. Approximate Location of the "Kau'olu Apartments" in the Foreground.
Figure 5
Site Suitability Map
Plantation Town Apartments

Legend
- Capped Spring
- Spring
- Area suitable for development (Area A)
- Areas suitable for development after 3 feet of surcharge removed (Areas D & F)
- Area suitable for development at 3 to 4 feet of surcharge removed (Portion of Area D & F)
- Area not to be developed at this time
- No buildings or life in this area.
- Reserve for roadways or open areas
- Leave as open area or parking

Source: Dames & Moore
elevation of 11 feet. Project plans propose to use the Floodway designated area for parking and a vegetable garden.

Zone X is defined as "areas determined to be outside 500-year floodplain" (Federal Emergency Management Agency, 2004).

5. Tsunami Inundation

The Kau'oulu Project is not situated in a coastal high hazard or tsunami inundation area.

6. Groundwater

Groundwater resources in the area are listed as being part of the Waipahu aquifer system of the Pearl Harbor aquifer sector. According to Mink and Lau (1990) two aquifers underlie this part of Waipahu. The uppermost contains groundwater that is basal and unconfined in sedimentary non-volcanic rocks. The lowermost aquifer is also basal and confined within horizontally extensive flank volcanic lava rocks. The Status Code assigned by Mink and Lau signifies that the upper aquifer is currently used, ecologically important, of low salinity at 250-1000 mg/l Cl, irreplaceable, and highly vulnerable to contamination. The Status Code for the lowermost aquifer is the same as that of the uppermost aquifer except that it is moderately vulnerable to contamination.

Groundwater has been encountered at depths ranging from -5 to -10 feet within the Kau'oulu Project.

7. Surface Water

There are no streams on the premises. Wailani Stream, which passes the property on the east and south, flows within a rectangular concrete lined channel. In the 1990s, the State of Hawaii improved the stream section between Paiwa Street on the north and Farrington Highway on the south. The purpose of the flood control project was to negate flooding of land adjacent to the stream to facilitate the development of the Kau'oulu Project.

Above Paiwa Street, the stream flows in a semi-natural streambed. Below Farrington Highway, the stream continues in a channelized section and discharges into Middle Loch of Pearl Harbor.

Water issues from a capped spring at the west end of the lot. Standing water extends approximately 200 feet in an east to west direction (roughly from behind the third home from Paiwa Street) to the sixth home along Nalii Street. The width of the standing water is approximately 10 feet. Local residents use the water for cultivating vegetables such as taro, squash, eggplant, and unry choi. A school of tilapia (Sarotherodon mossambica), an introduced fish common in Hawaii, was observed in the water.

The Housing and Community Development Corporation of Hawaii (HCDCH) has written the U.S. Army Corps of Engineers to determine the status of the standing water, which has some of the characteristics of a modified wetland. The Corps of Engineers commented that they consider the body of standing water to be a water of the United States. The discharge of dredged or fill material into fill into these waters will likely require a Department of the Army Permit (April 2006). The Department of Health commented that if a federal permit or license is required then a Section 401 (of the Clean Water Act)
Act) Water Quality Certification is required if the construction or operation of facilities may result in any discharge into the navigable waters (April 2008).

8. Flora

Previous grubbing, grading, and a surcharge program have removed all trees, shrubs, and groundcover on the property. Ruderal weeds are the principal vegetation. There is no rare, threatened, or endangered flora on the property.

Some residents on Nali Street grow wetland taro, eggplant, green onion, and bok choy around the on-site spring.

9. Fauna

No wildlife was observed on the property during several site visits. Given the presence of water and possible food sources, mice and rats are probably present. Dogs and cats were seen in fenced yards on the west.

Birds including barred dove, common mynah, red-whiskered bulbul, cattle egret, and house sparrows were observed on the property and roosting in trees at Waipahu District Park, at the end of Kau'olu Place, and neighboring residential backyards.

The property does not provide habitat for rare, threatened, or endangered fauna.

10. Archaeological Resources

There are no recorded archaeological features on the ground surface.

11. Cultural Resources

Because the property was created by fill material and given a history of urban activities on the site and in the immediate area, it is unlikely that cultural practices occurred on the property in the recent past and no on-going cultural activities are likely. This contention is supported by the absence of surface archaeological features, sacred sites, known burials, hunting and gathering resources, and historic trails.

Cultural Surveys Hawaii (2001) prepared a historical background report for a parcel of land comprising the Kau'olu Project. Their findings appear applicable to all of the Kau'olu Project and are summarized below.

Historic documentation and modern scholarship have identified the southern makai (seaward) portion of Waikule ahupua'a—where Waipahu Town and the present project area are located—as an extensive complex of fishponds, wetland agricultural fields, habitation sites, and pasture land that had evolved in traditional Hawaiian times before western contact.

Native Hawaiian activity and habitation at the middle of the 19th century were clustered in the makai lowlands around the meander of Waikule Stream (or Kapakah Stream) and the fishponds near the coast. Land Commission Award (LCA) documents from the mid-19th century Ma'hele and an 1899 government survey map indicate that the project area is located within an extensive network of taro lo'i that formerly dominated the makai
landscape of Waikële ahupua’a extending from the present Waipahu Town into the western side of Waipio Peninsula.

During the later 1800’s the taro fields of Waikële were converted to rice fields as Chinese immigrants began to lease and purchase Waikële lands. By 1892 there were 333 acres of land devoted to rice farming in Waikële and Waipio ahupua’a (Coulter and Chun, 1937:21). A map of rice farming areas of Oahu in 1892 indicates that the present project area was located within an expanse of rice fields that extended from Waikële to Waiau.

By the early decade of the 20th century rice farming in the Hawaiian Islands was in decline, beset by crop diseases and cheaper prices for mainland-grown rice. Commercial agriculture in Waikële became dominated by sugar with the development of the Oahu Sugar Company. The company imposed a new name on the area of its focus when, in 1897, its board of directors decided that “the name of the mill site and office of the company should be ‘Waipahu’” (in Nedbalek, 1984:13).

Waipahu Town developed throughout the 20th century expanding around the mill site. Farrington Highway was extended through Waipahu in 1939. Commercial areas developed along the highway and residential developments occurred mauka of the highway, behind the street front commercial buildings, and around the former plantation camps.

In informal interviews, long-time area residents recalled rice, asparagus, and gladiolas being grown in the general vicinity of the project area. They remember the project area as being wet, damp land because of springs in the area. One long-time resident recalls scattered residential structures located in the project area.

The project area is located within a former extensive network of wetland taro fields that dominated the makai Waikële landscape through traditional Hawaiian times and into the middle of the 19th century. The project area and its immediate surroundings were modified for rice farming during the latter 19th century. Into the 20th century the project area and its surroundings were filled in and enveloped by the expansion of Waipahu Town. Until recently, the project area itself was never developed as residential or commercial property, although land to the immediate north was developed for residential uses and land to the south for commercial activities.

The land fill (prior filling and the current surcharge program) and modern activities associated with Waipahu Town have eliminated any possible remnant of surface sites. Additionally, subsurface evidence of traditional Hawaiian agricultural activities would have been severely impacted by the importation of modern landfill materials. The present environmental conditions consist of imported landscape soils and introduced ornamental trees [Reference to a 35,000 sf site]. Based on the above factors, no traditional gathering activities would be anticipated or were observed during the field visit.

12. Hazardous Materials

Element Environmental (2006) prepared a Phase I Environmental Site Assessment of the property. Their review of the historical record and site inspection for hazardous materials revealed the following:
Several debris piles were observed along the northern boundary of the Property. The debris piles contained an assortment of debris including: engine blocks, miscellaneous car parts, rubber tires, empty 55-gallon drums, scrap metal, concrete rubble, and plastic containers. One full 1-gallon plastic container of antifreeze coolant was observed in one of the debris piles. Three car batteries were also observed. A number of debris piles were partially buried.

PVC piping both exposed and partially buried were observed throughout the southern and western halves of the Property. The PVC piping appeared to have been used for irrigation of small agricultural plots. Wooden boards used to separate plots were observed in the ground surface. Three former intake pipes approximately 3-inches in diameter were also observed hanging over the concrete channel into Wallani Stream.

The Property is not listed in any of the Federal and State databases researched.

Two RCRA small quantity generators were identified within a ½-mile of the Property. One of the sites, Leeward YMCA is located cross gradient to the west of the Property. The other site, Kawika's Painting and Waterproofing, is located upgradient to the north of the Property. Both sites did not have any reported violations and are not anticipated to adversely affect the Property.

The mechanical equipment shop at the former Waipahu Sugar Mill is listed on several databases. The site is currently undergoing further investigation and remedial action under the Voluntary Response Program. The Waipahu Sugar Mill is located approximately ½-mile west southwest of the Property. The direction of groundwater flow puts the Property cross gradient from the Waipahu Sugar Mill site and contaminated groundwater from the site is unlikely to have impact on the Property.

Six (6) Leaking Underground Storage Tank (LUST) sites were identified in the State of Hawaii Data Base in addition to the mechanic shop at the Waipahu Sugar Mill. Four (4) sites are located at a lower elevation and are at a distance that is not anticipated to influence the Property. One site is located cross-gradient to the Property at a distance that is not anticipated to influence the Property. Site cleanup has been completed at the one site located upgradient from the Property.

The Phase I Environmental Assessment also made mention of the leaking spring on the northern end of the property, the presence of surcharge material covering the site, and the former use of the site for subsistence agriculture. The Assessment also noted that the "historical records from the early 1900's to present indicate that the Property was never developed." The Phase I Environmental Assessment is attached as Appendix A.

13. Views

No significant stationary views from areas above and below the project site are identified in County plans (Central Oahu Sustainable Communities Plan, 2002) for the area. The site does not contain any significant visual features, but it offers panoramic views of the Ko'olau Mountains, Pearl City, Honolulu, West Loch of Pearl Harbor, and the Waianae Mountains.

In the absence of any structures on the premises, the view from adjoining residential lots is that of a fenced, vacant lot. Depending on location, existing views across the property are
of Waipahu District Park, the Kamalu and Ho'olulu apartment buildings, a fenced stream channel, and Paiwa Street and residential housing units.

The HonFed Building at the corner of Farrington Highway and Waipahu Depot Road (84 feet in height), the seven-story Ho'olulu and Kamalu elderly housing projects (about 80 feet in height) and the landmark Waipahu Sugar Mill smokestack (174 feet in height) are the highest structures in the immediate area.

C. Land Use Controls

The State Land Use Commission classifies the project site Urban—a land use classification that applies to most of built-up Waipahu.

The Oahu General Plan (2002) places Waipahu in the Urban Fringe and the community is part of the Central Oahu development plan area. The relationship of the project to applicable Central Oahu Sustainable Communities Plan "(Central Oahu SCP") objectives and policies are discussed in Section 3 of this Assessment.

The zoning map for Waipahu (Zoning Map No. 8) zones the property R-5 Residential, minimum 5,000 square foot lot (See Figure 7). The building height for R-5 zoned property is 25 feet.

The Kau'olu Project is not located within the boundaries of the City and County of Honolulu's Special Management Area ("SMA"). A SMA Permit is not required to build the project.

D. Socio-Economic Conditions

1. Population and Housing

The 2000 Census reported a population of 33,108 residing in the Waipahu Census District Place (the geographic area bounded by the H-1 Freeway, Kunia Road, Kamehameha Highway, and areas below Farrington Highway excluding federal land). Females (16,756) outnumber males (16,352). A bi-modal distribution occurs with male and female population the greatest in the 25 to 44 years cohorts and under 5 to 14 years cohorts. There were 7,556 households and the average household size was 4.23 persons. Household size is significantly greater than that for Honolulu (2.95 persons) and the overall State average (2.92 persons). The larger household size may be attributable to a household including an extended family or several extended families.

The Census tabulated 8,033 housing units of which 7,556 (or 94.2%) were occupied and 467 or 5.8% were vacant. Of the occupied units, 4,043 were owner occupied and 3,523 renter occupied. Population in owner occupied units totaled 18,726 persons versus 13,248 in renter occupied units. Household size for owners is larger (4.63 persons) than renters (3.76 persons).

Median income for households in 1999 was $49,444, which is slightly below the State median income of $49,820.
E. Public Facilities and Services

1. Circulation and Traffic

The project site is located between Mokuola Street on the west and Paiwa Street on the north. A summary of the area roadway system is presented below.

Mokuola Street is a two-way, two-lane City and County of Honolulu roadway oriented in the north-south direction with one lane of traffic in each direction. The roadway is an extension of Managers Drive between Farrington Highway and the Interstate H-1 Freeway overpass and continues towards Waikiki as Lumina Street.

At its intersection with Mokuola Street, Kau'olū Place is a two-way, two-lane State of Hawaii roadway. One lane is provided in each direction, which also serve through and turning movements. The Kau'olū Place approach to the intersection is stop-controlled. Kau'olū Place is one of the streets to directly access the project site.

Approximately 400 feet to the south of the T-intersection with Kau'olū Place, Mokuola Street intersects with Hikimoe Street, a two-way, two-lane roadway oriented in the east-west direction. Hikimoe Street serves as a connector road between Mokuola Street and Waipahu Depot Street and accommodates the Waipahu Transit Center. At this signalized T-intersection all approaches include one lane in each direction that serve through and turning traffic movements. This signalized intersection operates with two traffic signal phases, with 90-second and 100-second cycle lengths during the AM and PM peak hours of traffic, respectively.

The second proposed access driveway to the project site is located on Paiwa Street, a two-way, two-lane City and County of Honolulu roadway oriented in the north-south direction that serves as a collector road between the H-1 Interstate Freeway and Farrington Highway (Route 90). Just north of the proposed project driveway, Paiwa Street intersects with Hillihua Street, a two-way, two-lane City and County of Honolulu Roadway oriented in the east-west direction that serves as a local road between the adjacent residential uses and Paiwa Street. At this unsignalized T-intersection, Paiwa Street and Hillihua Streets have one lane in each direction that serves through and turning movements with a stop control traffic operation on the Hillihua Street intersection approach.

Approximately 300 feet north of the T-intersection with Hillihua Place, Paiwa Street intersects Na'ili Street, a two-way, two-lane City and County of Honolulu roadway oriented in the east-west direction that serves as a connector road linking Mokuola Street and Paiwa Street. At this unsignalized intersection, all approaches have one lane in each direction that serve through and turning traffic movements.

Existing AM and PM hours of traffic at the six intersections identified above are shown in Figures 8 and 9 and summarized in Table 2. Level of Service ("LOS") calculations for existing traffic conditions are shown in Table 4 (in Section 3 of this assessment). LOS is a quantitative and qualitative assessment of traffic operations. Levels of Service are defined by LOS "A" through "F" with LOS "A" representing ideal or free-flow traffic operating conditions and LOS "F" unacceptable or potentially congested traffic operating conditions. LOS definitions are provided in Appendix B.
Table 2. Existing Peak Hour Traffic

<table>
<thead>
<tr>
<th>Intersection/Direction of Traffic</th>
<th>Hikimoe Street (E/W) @ Mokuola Street (N/S)</th>
<th>Kauolu Place (E/W) @ Mokuola Street (N/S)</th>
<th>Kahualani Street (E/W) @ Mokuola Street (N/S)</th>
<th>Waipahu Street (E/W) @ Mokuola Street (N/S)</th>
<th>Hillhua Street (E/W) @ Palwa Street (N/S)</th>
<th>Naui Street (E/W) @ Palwa Street (N/S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Bound</td>
<td>140</td>
<td>20</td>
<td>38</td>
<td>483</td>
<td>11</td>
<td>59</td>
</tr>
<tr>
<td>West Bound</td>
<td>125</td>
<td>14</td>
<td>71</td>
<td>383</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>North Bound</td>
<td>315</td>
<td>248</td>
<td>250</td>
<td>265</td>
<td>314</td>
<td>322</td>
</tr>
<tr>
<td>South Bound</td>
<td>384</td>
<td>451</td>
<td>487</td>
<td>446</td>
<td>524</td>
<td>474</td>
</tr>
<tr>
<td>PM Peak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East Bound</td>
<td>212</td>
<td>25</td>
<td>38</td>
<td>491</td>
<td>28</td>
<td>63</td>
</tr>
<tr>
<td>West Bound</td>
<td>173</td>
<td>37</td>
<td>78</td>
<td>471</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>North Bound</td>
<td>358</td>
<td>463</td>
<td>394</td>
<td>407</td>
<td>260</td>
<td>250</td>
</tr>
<tr>
<td>South Bound</td>
<td>353</td>
<td>309</td>
<td>357</td>
<td>454</td>
<td>268</td>
<td>224</td>
</tr>
</tbody>
</table>

2. **Water**

Water service is available from 12" service mains in Paiwa Street and Kau'olou Place.

3. **Wastewater**

Municipal sewers are located in Paiwa Street and Kau'olou Place. A 24" municipal sewer is also found in an on-site sewer easement paralleling Wallani Stream Channel.

4. **Protective Services**

Police service originates from the Pearl City Police Station on Waimano Home Road about 2½ miles away in Pearl City.

First response to any on-site emergency would originate from the Waikole Fire Station (Engine 42). The station is located about 1.5 miles to the north of the project site at the corner of Lumiaina Street and Lumiaina Place in the Waikole subdivision. Three captains and 15 fire fighters are assigned to the station and 5 fire fighters and one captain are on duty at all times. An Engine Class I is the principal fire fighting equipment posted at the station. Second response would originate from the Waipahu Fire Station (Engine 12) where an engine and ladder companies are posted.

A City and County of Honolulu emergency ambulance is based at the Waipahu Fire Station.

5. **Utility Services**

Utility lines within the Kau'olou Project are placed underground. Three utility poles located in the southeastern portion of the project site support overhead electrical lines from Waipahu District Park. [The poles and overhead service will be relocated off-site during construction.]

6. **Public Schools**

Public schools in Waipahu are organized as the Waipahu High Complex. School enrollment and student capacity of schools likely to be affected by the project (in bold type) for 2005-2006 are shown below. Two of the schools already exceed its design capacity.

<table>
<thead>
<tr>
<th>School</th>
<th>2005-2006 Enrollment</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>August Ahrens Elementary</td>
<td>1,270</td>
<td>1,479</td>
</tr>
<tr>
<td>Honowai Elementary</td>
<td>791</td>
<td>--</td>
</tr>
<tr>
<td>Kaleiopuu elementary</td>
<td>967</td>
<td>--</td>
</tr>
<tr>
<td>Waikole Elementary</td>
<td>724</td>
<td>--</td>
</tr>
<tr>
<td>Waipahu Elementary</td>
<td>1,035</td>
<td>--</td>
</tr>
<tr>
<td>Waipahu Intermediate</td>
<td>1,320</td>
<td>1,293</td>
</tr>
<tr>
<td>Waipahu High</td>
<td>2,544</td>
<td>2,071</td>
</tr>
</tbody>
</table>

Waipahu High Complex Total: 8,651

7. Recreation

Waipahu District Park, makai of the project across Wailani Stream Channel, is one of the major recreation facilities in Waipahu. A gymnasium, two recreation buildings, playground, two softball fields, swimming pool, training pool, outdoor tennis courts, outdoor basketball courts, outdoor volleyball courts, a baseball/football field, and off-street parking comprise this 13.8 acre public recreation facility.

Hans L’Orange Neighborhood Park, located about three blocks mauka of the project site at the intersection of Paiwa and Waipahu Streets, is widely known for its baseball field.

8. Medical Facilities

Pali Momi Medical Center in Alea, approximately 5 miles away, and the Saint Francis Medical Center West, about 3 miles away, are the nearest major medical facilities. Kaiser Permanente operates a clinic on Lecole Street about two miles away. Private practitioners in medicine, dentistry, and eye care maintain offices in Waipahu.

Emergency ambulance service can be dispatched from the Waipahu Fire Station and St. Francis Medical Center West located on the western edge of Waipahu.
SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS
AND MEASURES TO MITIGATE ADVERSE EFFECTS

A. Assessment Process

The scope of the project was discussed with Plantation Town Apartments LLC, the consulting architect, and members of the design team. State and County agencies were consulted for information relative to their areas of expertise. Time was spent in the field noting site conditions and conditions in the vicinity of the project. The sum total of the consultations and field investigations helped to identify existing conditions and features that could affect or be affected by the project. These conditions include:

- The site is vacant and devoid of structures;
- The mauka half of the site (west half) is suitable for development;
- There are no rare, threatened, or endangered flora or fauna on the property;
- There are no recorded archaeological or cultural resources on the property;
- There are no environmental hazards associated with the property;
- Standing water issues from a leaking spring on the western property boundary;
- A portion of the southern half of property is located in a flood hazard zone;
- The property is not located in a coastal high hazard area or tsunami inundation area;
- Existing water, wastewater, drainage, and utility systems in the area are available to serve the proposed project.

B. Anticipated Short-term Impacts

Site work is a necessary function to prepare the land for building the improvements to follow and is probably the most disruptive construction activity on the environment. Site work is a consistent source of fugitive dust. Site contractors are aware that dust is a nuisance to both workers and people living near work sites and it is imperative for them to maintain stringent dust controls. Water sprinkling is probably the most effective dust control measure given the size of the lot and the scale of the proposed improvements. The Contractor, however, may choose to implement other measures based on their experience with similar projects, physical conditions, and job sites. Air pollution control measures will comply with Chapter 60.1, Air Pollution Control regulations of the State Department of Health.

The Contractor will be responsible for general housekeeping of the site and for keeping adjacent streets and properties free of dirt, mud, and construction litter and debris.

Construction noise will be unavoidable during the entire construction period, which is projected to be 16 months. Exposure to noise, however, is expected to vary in volume, frequency, and duration. Noise will vary also by construction phase, the duration of each phase, and the type of equipment used during the different phases. It is also anticipated that actual construction work will be moving from one location on the project site to another during the construction period. Noise will be most pronounced during the early stages when the site is grubbed of vegetation, surcharge removed, and the building foundation constructed.
Residences on Nalii Street adjoining the project site are predicted to experience the highest noise levels during construction due to their close proximity to the proposed structures where the major construction activities will take place. Adverse impacts from construction noise, however, should be temporary due to the temporary nature of the work and public health regulations governing construction noise. Nearby residents can expect a temporary degradation of the quality of the acoustical environment in the immediate vicinity of the project site.

Because of the underlying soil conditions, the buildings will be supported on piles. A pneumatic pile driver will be used to drive the piles. The pneumatic pile driver is perhaps the noisiest and most irritating piece of construction equipment (at least to those who are exposed to its hiss-boom staccato) that can be used on a construction site. The use of this equipment and its associated noise impact cannot be avoided. Pile driving typically emits noise in the range of 95 to 105 dBA at 50 feet from the source. Regardless of measurable sound levels, pile driving noise is irritating to those exposed to it infrequently. Pile driving noise is difficult to attenuate because this activity occurs after construction sites are cleared of vegetation, structures, and other features that can act to attenuate noise. Pile driving will expose residents to the "hiss-boom" sound for 2 to 3 months. The project developer is exploring alternatives to using a pneumatic pile driver in an effort to reduce the noise that is generated by this piece of equipment. The contractor will give advance notice to residents in the vicinity of the property of the date and approximate times that pile driving will occur (OEQC Comment, April 2006).

Community Noise Control regulations establish a maximum permissible sound level for construction activities occurring within various zoning districts. Multi-family residential use is placed in the Class B zoning district and the maximum permissible sound level is 60 dBA between the hours of 7:00 AM and 10:00 PM (Chapter 46, Community Noise Control, 1998). Construction activities often produce noise in excess of the permissible daytime noise level and a noise permit (or variance) will be needed. The Contractor will be responsible for obtaining the permit and complying with conditions attached to the permit. Work will be scheduled for normal working hours (7:00 AM to 3:30 PM) Mondays through Fridays.

Excavating, grading, and trenching activities will expose soil to the elements thus creating opportunities for runoff and erosion. Earthwork will be performed in accordance with the Revised Ordinances of Honolulu, 1990, as amended and the Rules Relating to Soil Erosion Standards and Guidelines. Best Management Practices (BMPS) for erosion and drainage control during construction will be prepared for review and approval by the Department of Planning and Permitting.

An NPDES permit for storm water runoff associated with construction activities will be required because more than one acre of the total land area will be disturbed during construction. Any discharges related to project construction or operation activities shall comply with applicable State Water Quality Standards as specified in Hawaii Administrative Rules, Chapter 11-54 (Department of Health Comment, April 2006).

The presence of a high water table may require dewatering for the building foundations and pile supports extending below the water table. If dewatering is needed, water and solids will be pumped into on-site detention basins and allowed to evaporate. Dried material will then be spread over the ground or disposed off-site. An NPDES Permit will be required from the State Department of Health for any dewatering activity pursuant to Chapter 54, Hawaii Administrative Rules.
Subsurface archaeological and cultural features should not be encountered because the project is proposed on fill land covered by up to 8-feet of surcharge in some places. The State Historic Preservation Division commented that "no historical properties will be affected by this undertaking" because previous grubbing, grading, cultivation, and residential development/urbanization has altered the land (April 2006).

Adverse effects on flora are not anticipated. None of the weeds observed on the property are indigenous to the area and listed or proposed for rare, threatened, or endangered status.

As recommended in the Phase I Environmental Site Assessment:

- The three car batteries and antifreeze coolant (1-gallon) observed on the Property will be properly disposed and/or recycled.
- Surface debris will be excavated, segregated and properly disposed and/or recycled. Most of the debris was partially buried or overgrown with brush.
- The possibility exists that debris may have been illicitly buried. If buried debris is encountered during construction, the debris will be removed, segregated and properly disposed and/or recycled. The soil beneath the debris should also be inspected for evidence of spills.
- PVC irrigation piping to be removed will be properly disposed and/or recycled.
- Local area residents have used the property for agricultural purposes. It is unknown whether any of the residents had applied pesticides or herbicides to any of the agricultural plots, and residual levels of pesticides and herbicides may exist on the Property. Based on the nature of the plots and the proposed future use of the Property, further investigation for pesticides and herbicides is not warranted at this time.

Work in Paiwa Street and Kau'olou Place to connect infrastructure and utilities and to construct the project driveways will be required. A traffic management plan will be prepared and submitted to the Department of Planning and Permitting for review and approval for work in Paiwa Street. Measures for mitigating construction-related traffic impacts may include but are not limited to:

- Posting notices alerting residents and motorists of scheduled road work.
- Posting warning signs on both sides of the work area to alert motorists of construction and to slow traffic speed.
- Posting flagmen for traffic control.
- Positioning traffic cones or other directional devices in the roadway to guide vehicles around work areas.
- Keeping at least one traffic lane open at all times to minimize inconveniences to motorists.
- Limiting road construction to between 8:00 AM and 3:00 PM, Monday through Friday.
- Covering open trenches with steel plates during non-working hours and posting safety devices with warning lights to alert motorists of the construction area.

Construction vehicles hauling men and material will contribute to traffic on streets leading to and surrounding the project site. These streets include Farrington Highway, Waipahu Street, Paiwa Street, Mokuola Street, and Kau'olou Place. Material deliveries will be scheduled during non-peak traffic hours to minimize impacts on local traffic. Construction
material will be off-loaded and stockpiled on-site; however, should materials need to be unloaded within the road right-of-way, flagmen will be posted for traffic control. When this occurs, traffic delays can be expected but should not last for more than a few minutes.

The development budget of approximately $45 million represents a significant infusion of capital into the local economy although most of the benefits will accrue to the construction industry. The amount includes the cost of purchasing direct and indirect labor, materials, shipping, and all professional services associated with the project. An estimated 100 to 150 persons (the vast majority being tradesmen) will be on-site at various times over the 16 month construction period. Indirectly, the budget will also pay for site architects and construction managements of companies providing the labor. Labor purchases will also contribute tax dollars to federal and state governments in the form of payroll deductions.

C. Anticipated Long-term Impacts

The addition of 330 residential units would contribute to the total housing stock in Waipahu and the Kau'olū Project. Multi-family dwelling units would be available for first-time buyers, households desiring larger quarters, and senior households wanting "less house" to maintain.

The project is proposed at a time when the State Legislature is talking about a goal of building 10,000 to 15,000 affordable units within the next five years. A recent study estimated that 44,160 new homes (32,650 on Oahu) are projected to be needed by 2009 to satisfy pent-up demand. Of those, 21,280 (15,900 on Oahu) are needed for low-income households (Honolulu Advertiser, 2006)*. Plantation Town Apartments is not a low-income housing project but its units are sized and priced for households earning 80% to 120% of State median income.

Households applying for a unit would have to qualify based on household size and income at a stipulated percentage of State median income for that size household. For the year 2006, State median income for a 4-person household is $57,750. Based on household size and income, households can qualify for units within their range of affordability. For example, a family of four earning the median income could qualify for a 3-bedroom unit in the project.

Based on unit size, households will range from 1 to 5-persons per household with some 6-person households. Resident population was projected using the number of persons per household as a variable.

Table 3. Estimated Resident Population

<table>
<thead>
<tr>
<th>Type of Unit</th>
<th>Number Of Units</th>
<th>Persons per Household</th>
<th>Estimated Number of Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior 1-BDR</td>
<td>48</td>
<td>1 to 1.5</td>
<td>48 to 72</td>
</tr>
<tr>
<td>One Bedroom</td>
<td>92</td>
<td>1 to 2.5</td>
<td>92 to 230</td>
</tr>
<tr>
<td>Two Bedroom</td>
<td>146</td>
<td>2 to 3.5</td>
<td>292 to 511</td>
</tr>
<tr>
<td>Three Bedroom</td>
<td>44</td>
<td>3 to 4.5</td>
<td>132 to 198</td>
</tr>
</tbody>
</table>

The calculation provides an extreme range that seems to be too low on one end and too high on the other. In lieu of a better projection model, it is estimated that resident population
could range from between 800 to 900 people. This range is not a hard and fast number but will fluctuate over time. Household size was not used for this calculation. The average household size for the Waipahu CDP is 4.23 persons per household, which is greater than the Oahu average of 2.95 persons per household (Census, 2000). In Waipahu, it is not uncommon to have more than one family comprising a household and this may partially explain the larger household size.

It is anticipated that many of the potential residents already reside in Waipahu—singles and young couples looking for a first "home", young families desiring larger living quarters, and "empty nesters" and seniors who no longer need a single-family home. Therefore, a redistribution of population rather than a net gain scenario is anticipated. Indirectly, those units that are vacated would in turn be sold or rented to others thereby contributing to some population gain in the town.

The project is also consistent with the HCDOH goal of providing the maximum number of affordable housing units using the minimum amount of State resources. The developers of Plantation Town Apartments have assumed the risk of putting up the project, securing construction and long-term financing, preparing architectural and engineering drawings and associated plans, and procuring development permits. The State's contribution is to put up land that is ready and available for residential development.

The project site has been planned for residential development since the early 1990s. Collectively, the State of Hawaii and the project developer are partnering to complete the Kau'oula Project master plan and to deliver affordable housing to Hawaii residents.

Project residents would derive social benefits in the form of clean, comfortable, secure, and affordable housing, and owning their home. Additional benefits would include proximity to public transportation (the Waipahu Transit Center on Hikimoe Street), shopping areas, child care services, and government services at the Leeward Civic Center. Residents would also derive economic benefits associated with home ownership.

Daily, on-going residential and operational activities will generate noise and discharge air pollutants. Delivery vehicles, private automobiles, recreational sounds, and maintenance noise can be expected during daylight hours when most of these activities take place. During evening hours, noise should diminish to levels experienced in the nearby residential neighborhoods.

Air conditioning and associated mechanical equipment will be enclosed and screened to attenuate noise. Landscape plantings and yard setbacks also would aid in preventing noise from escaping the project site.

Ambient air quality should not be adversely affected in the long-term. The principal source of air pollution is expected to be exhaust emissions from vehicles entering and exiting the project and passing traffic. Exhaust emissions will be disbursed by the prevailing trade winds without adverse effects.

Landscaping will add greenery to an otherwise drab appearing lot thereby significantly improving the appearance of the site. Vertical plantings would help to conceal ground level activities, break up the vertical form and building mass, and add color.
The open body of water will be retained as a project amenity. [may be removed by capping the leaking spring. The Housing and Community Development Corporation of Hawaii has inquired with the U.S. Army Corps of Engineers about capping the leaking spring. If that leak can be capped then it will be. If the leak cannot be capped, then the developer will erect a fence around the area and leave the leaking spring as is.] Using the spring water for irrigating the project’s landscaping will be explored.

The analysis of potential traffic impacts accounts for several conditions that can influence traffic operations on local streets. Traffic growth without the project projected was estimated and projected to Year 2008. The estimates were based on current and historic traffic data and contributions to traffic from development occurring nearby. Vehicle trips to be generated by the project were then estimated for selected time periods, typically the peak AM and PM hours. The trips also can be distributed to adjoining streets if there is more than one entry to a project. The cumulative data was then used to forecast traffic impacts on traffic operations with the project. This methodology was performed for this assessment.

Analysis of the State Department of Transportation historical traffic data was made to determine an appropriate ambient growth of traffic demands in the project vicinity. The data reveals a decrease in the annual traffic growth rate in the vicinity of the project. Therefore, for conservative analysis purposes, the travel forecast used in this study is based upon a conservative annual traffic growth rate of 2% per year. Using Year 2006 as the base year, a growth factor of 1.04 was applied to existing traffic demands on the major roadways to achieve the projected ambient traffic demands for Year 2008.

Traffic operations under Year 2008 without project conditions are expected to remain similar to existing conditions with the critical approaches for the six study intersections along Mokuola Street and Paiwa Street also expected to remain similar to existing conditions.

Project generated traffic rates were based on generally accepted techniques developed by the Institute of Traffic Engineers. Trip generation rates are developed empirically by correlating the vehicle trip generation data with various land use characteristics such as the number of vehicle trips per dwelling unit. Table 4 summarizes the project trip generation characteristics applied to the AM and PM peak periods of traffic.

Table 4. Peak Hour Trip Generation

High-Rise Apartments (Independent Variable)

<table>
<thead>
<tr>
<th></th>
<th>AM Peak</th>
<th></th>
<th>PM Peak</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>ENTER</td>
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<tr>
<td></td>
<td>99</td>
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<td>116</td>
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</table>

Based on existing traffic volumes along Mokuola Street and Paiwa Street, both roadways have about the same amount of vehicles traveling through the project vicinity during both peak periods of traffic. Therefore, it was assumed that 50% of the projected vehicle trips will use the proposed Kau'olou Place driveway and 50% will use the proposed Paiwa Street driveway.

A proposed multi-family residential development consisting of approximately 70 apartment units may be located within the project vicinity. The project is projected for completion by the Year 2008 with access along the east side of Mokuola Street between Naili Street and Kau'olou Place. Although specific project information for the apartment project is not available at this writing, vehicular trips to and from the project were incorporated in the Year 2008 traffic projections.

The Year 2008 AM and PM peak period traffic volumes with the proposed Plantation Town Apartments are shown in Figures 10 and 11. Table 5 summarizes the projected traffic volume at the study intersections. The cumulative volumes consist of project-generated traffic superimposed over Year 2008 projected traffic demands. The analysis is based on the concept of Level of Service to identify the traffic impacts associated with traffic demands during the peak periods of traffic.

The Year 2008 cumulative and AM and PM peak hour traffic conditions with the project and calculated Level of Service are summarized in Table 6. Existing and projected Year 2008 (Without the Project) Level of Service conditions are included for comparison purposes.

Traffic operations in the vicinity of the proposed Plantation Town Apartments project are expected to remain similar to existing and Year 2008 without project conditions during both peak hours of traffic with the exception of traffic operation at the Mokuola Street and Hikimoe Street intersection. The level of service for the northbound approach of this intersection is expected to deteriorate from LOS "B" to LOS "C" conditions during the projected PM peak period. The intersection of Paiwa Street and the project driveway would operate at acceptable levels of service of LOS "C" and LOS "B" during the projected AM and PM peak period, respectively. The critical movements/approaches at the remaining study intersections are expected to operate at levels of service similar to Year 2008 without project conditions during both peak hours of traffic.

In addition, the total traffic volume entering the study intersections along Mokuola Street and Paiwa Street are anticipated to increase by 1-2% during both AM and PM peak periods. These increases in the total traffic volumes along this roadway are in the range of daily volume fluctuations and represent a minimal increase in the overall traffic demands.

Water use is estimated at 99,000 gallons per day for domestic consumption. The municipal water system [can] is presently adequate to supply the estimated daily flow. The Board of Water Supply will confirm the availability of water when the Building Permit is submitted for approval (BWS Comment, April 2006). Applicant will be assessed a facilities charge prior to connecting to the system.

Wastewater will be discharged into the municipal sewer system and transmitted to the Honolulu Wastewater Treatment Plant for treatment and ocean disposal. The Department of Planning and Permitting has approved a Wastewater Connection for the project.
PLANTATION TOWN APARTMENTS

YEAR 2008 AM PEAK HOURS OF TRAFFIC WITH PROJECT

NOT TO SCALE
Table 5. Year 2008 Peak Hour Traffic with Project

<table>
<thead>
<tr>
<th>Intersection/Direction of Traffic</th>
<th>Hikimo Street (E/W) @ Mokuola Street (N/S)</th>
<th>Kauolu Place (E/W) @ Mokuola Street (N/S)</th>
<th>Kahuailani Street (E/W) @ Mokuola Street (N/S)</th>
<th>Waipahu Street (E/W) @ Mokuola Street (N/S)</th>
<th>Project Driveway (E/W) @ Palwa Street (N/S)</th>
<th>Hilihua Street (E/W) @ Palwa Street (N/S)</th>
<th>Nali Street (E/W) @ Palwa Street (N/S)</th>
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<tbody>
<tr>
<td>AM Peak</td>
<td></td>
<td></td>
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<tr>
<th>Intersection</th>
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<td>Exist</td>
<td>Year 2008 w/out Proj</td>
<td>Year 2008 w/ Proj</td>
<td>Exist</td>
</tr>
<tr>
<td>Mokuola St/ Hikimoe St</td>
<td>Northbound (LT-TH)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Eastbound (LT-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Mokuola St/ Kauolu Pl</td>
<td>Southbound (LT-TH)</td>
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<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Westbound (LT-RT)</td>
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<td>B</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Mokuola St/ Kahuali`ani St</td>
<td>Eastbound (LT-TH-RT)</td>
<td>C</td>
<td>C</td>
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<tr>
<td></td>
<td>Westbound (LT-TH-RT)</td>
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<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Mokuola St/ Waipahu St</td>
<td>Northbound (LT-TH)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Southbound (TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Paiwa Street/ Project Driveway</td>
<td>Eastbound (LT-RT)</td>
<td>—</td>
<td>—</td>
<td>C</td>
<td>—</td>
</tr>
<tr>
<td>Paiwa St/ Hilihua St</td>
<td>Westbound (LT-RT)</td>
<td>B</td>
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<td>B</td>
<td>B</td>
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<tr>
<td></td>
<td>Southbound (LT-TH)</td>
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<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Paiwa St/ Nalii St</td>
<td>Eastbound (LT-TH-RT)</td>
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<td>B</td>
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<td></td>
<td>Westbound (LT-TH-RT)</td>
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<td>C</td>
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</table>
Domestic solid waste is estimated at 1,155 pounds per day (3.5 pounds per dwelling unit). A private hauler will be contracted to collect and transport solid waste to an approved disposal facility.

Storm runoff would be higher in volume (24.4 cfs) as compared to the runoff generated under existing conditions (12.6 cfs) because exposed and undeveloped terrain will be replaced by impervious surfaces. The current City and County of Honolulu policy on storm water runoff is to reduce the pollution associated with storm water runoff from new development. Because the site is currently vacant, on-site generated storm runoff is minimal. Development will increase storm water by the addition of roofs and paved surfaces.

To comply with City storm water quality policies, it is proposed a) to direct storm water to open space areas for percolation into the ground and evaporation; and b) provide an on-site detention system with controlled release to the municipal drainage system. Other methods may be implemented pursuant to approved, site-specific Best Management Practices and criteria in Part II Water Quality Criteria, City Rules Relating to Storm Drainage Standards (Department of Planning and Permitting, 2000). The quantity of storm water discharge into the City system should be less than or equal to that runoff generated by the existing vacant undeveloped land within the project limits (Department of Facility Maintenance Comment, April 2006).

The project may place additional demands on public recreation facilities and programs. However, the project includes a private park common area of approximately [39,000] 30,775 square feet and a recreation building. The nearby Waipahu District Park provides an array of sport facilities and recreation programs for all ages. Department of Parks and Recreation administrators believe that resident recreational needs can be accommodated on-site by the proposed facilities. It is anticipated that residents will use the recreational facilities and enroll in recreation programs offered at the Waipahu District Park. The purpose of having the facility is to help provide for the recreation needs of Waipahu residents and the people of Oahu (Meeting with Department of Parks and Recreation, April 2006).

The Honolulu Police Department regularly patrols the neighborhood and their presence will be supplemented by on-site security. The Police Department commented that there should be no significant impact on the facilities or operations of the Honolulu Police Department (April 2006).

Fire protection will originate from the Waiekele Fire Station with back-up from the Waipahu Fire Station and the Pearl City Fire Station. It is anticipated that the proposed project would not adversely affect fire service in Waipahu.

It appears that public schools in Waipahu are at or exceed their respective design capacities. The influx of additional school-age children from residential projects in the region may increase student enrollment for schools in the Waipahu High Complex. The Department of Education commented that an estimated 99 students would reside in the project. The schools most likely to be impacted by the project will be August Ahrens Elementary, Waipahu Intermediate, and Waipahu High schools. The DOE also noted that Waipahu Intermediate and Waipahu High already exceed their design capacity and have done so for several years (April 2006).
The project site is one of the last and the largest undeveloped lot in the Kau'olu Project. Since 1990, the State has master planned the lot for multi-residential use. The City's Central Oahu Sustainable Communities Plan ("SCP") designates the property Residential and it is zoned R-5 for low-density residential use. Both State and County plans are consistent in identifying residential use as the desired use for the property. The land use issue is at what density residential use should be developed.

The project is consistent with the General Plan objective (Section IV. Housing) "To provide decent housing for all the people of Oahu at prices they can afford." Policies 7 and 8 of the housing component seek to provide financial and other incentives to encourage the private sector to build homes and engage in joint public-private development for low- and moderate income housing (Department of Planning and Permitting Comment, April 2006).

Examples of both low-density residential uses are seen in residential subdivisions to the north and west of the property and medium-density residential uses are seen in the Kamalu and Ho'olule elderly housing projects. The increase in building height approved for the Kamalu and Ho'olule projects, demonstrated that under certain conditions and public needs (in that instance, the need for elderly rental housing) zoning was set aside to achieve a housing goal. The case for the Plantation Town Apartments is not so different. There is a pressing need to provide housing at prices affordable to Hawaii residents. The City will be asked to set aside the zoning height for the property (via a 201G exemption) to allow the project to be built at a higher density than allowed by the existing zoning. The proposed project is scheduled to provide affordable housing units for occupancy in late 2007.

A medium density development would support the Central Oahu SCP for Waipahu. Few persons would dispute the contention that with the close of the Waipahu Sugar Mill, there has been a significant downturn in the local economy. The former plantation town is looking at alternative opportunities for revitalizing the town. There are activity nodes in and around the town that attract people to the area. The Waipio Soccer Complex hosts soccer tournaments annually drawing national and international teams; residents and visitors shop at the Waikele Shopping Center on the north of town; Hawaii's Plantation Village on the south of town is making efforts to promote Hawaii's and Waipahu's plantation and cultural heritage; and light industrial activities are slowing moving into a light-industrial park above the former Waipahu Sugar Mill.

The Central Oahu SCP proposes creating four "land use anchor areas" in the town and its environs. Of interest is the location of the Old Waipahu Town Anchor that includes "the Manager's Drive site, the Sugar Mill site, Hans L'Orange Park, Waipahu Street and Waipahu Depot Road, and the Waipahu Cultural Garden Park." Most of these community features are within a 0.25 mile walking distance from the project site.

The proposed project is located near the center of Waipahu Town or at least in proximity to its historic town core centered on Waipahu Depot Road—a once thriving business district. Arakawa's and Big-Way Super Market, two old-time mainstay tenants and employers in Waipahu, closed their doors years ago. In the absence of stores with consumer drawing power, the downtown business and shopping core now supports a spattering of dining places, medical offices, a church, personal grooming salons, and some financial institutions. Whereas businesses can make capital investment for facilities to stimulate revitalization and government can offer economic incentives, it takes people to frequent the shops and stores and to purchase goods and services. These three components are necessary to sustain
any type of revitalization effort—to create the synergy for a dynamic community business environment. Residents in the Kau'olū Project and people in existing and future residential development near the downtown business district could provide the consumer base to help attain this objective.

The project would be a neighbor to the Waipahu Civic Center and Waipahu Library (the Community Facilities Anchor), and the Waipahu Adult Day Health Care Center. It is also close to the City's Waipahu Transit Center on Hikimoe Street. The Center is a hub for bus traffic between Honolulu, the Leeward Coast, and destinations within Waipahu Town. The Central Oahu SCP prescribed a transportation and residential scenario that can be applied to the Plantation Town Apartments development, revitalization of the Waipahu Town Core, and the bus transit center thusly:

"Moderate density housing and commercial development will be built along a rapid transit corridor stretching from the City of Kapolei through Waipahu to Pearl City in the Primary Urban Center. The moderate density residential and commercial uses centered at nodes along the corridor will support efficient use of buses and other forms of mass transit along the corridor, allowing some residents to minimize automobile use."

Development density is calculated at 55 units per acres (330 units + 6.0 acres), which is within the range of [55] 25 to 90 units per acre for medium density apartments prescribed in the Central Oahu SCP.

The higher density would also allow the State to recover some of the site development costs for the Kau'olū Project. Over the years, the State has funded the cost of new roads, water and sewer lines, drainage improvements, and the surcharge program to make its Kau'olū Project a reality. In addition, the Housing and Community Development Corporation of Hawaii is tasked to deliver affordable housing and the project site is the only site in Waipahu where State owned land with in-place infrastructure is ready and available to be developed. The Central Oahu SCP has the objective of building communities with a transportation system that provides easy access to transit, encourages people to walk and bike, and reduces the need for the use of the automobile. Although not a community, the entire Kau'olū Project comprises a neighborhood that can help to achieve these policy objectives within the broader Waipahu community.

The Department of Planning and Permitting commented that the height of the two Plantation Tower Apartment buildings exceeds the 60 feet height guideline of the Central Oahu SCP and an urban design principle of the Waipahu Livable Communities Initiative limiting buildings to two to three floors in height. At 104 feet, the project significantly exceeds Central Oahu SCP policies prescribing a low-rise and "small town" form of development. The DPP also acknowledged that the project's affordable housing contributions and appropriate location in proximity to community facilities lends support to the proposed Chapter 201G, HRS exemptions (April 2006).

Note: the project developer has applied for Chapter 201G, HRS exemptions to exempt Plantation Town Apartments from the 25-foot height limit for the residential zoning district (Cited in Section 1.2 Building Placement) and the Central Oahu SCP 60 feet height guideline.
The Central Oahu Sustainable Communities Plan and the Waipahu Livable Communities Initiative seek to preserve the scale and sense of Waipahu as a small town. Waipahu, however, is not as small a town as many make it out to be. Consider that the town is located between the Waipio Soccer Park, the major venue for soccer on Oahu and Central Oahu Regional Park with its state of the art tennis, baseball, and softball facilities. The Waikiki Shopping Mall, a major shopping center that attracts residents and visitors, is located above the town. Toward the western edge of town, strip shopping malls line the mauka side of Farrington Highway, and a major Leeward Oahu medical facility is located a short distance away. Urban expansion is pushing northward along Kunia Road and with growth comes more population and commercial activities to support that growth.

Thus on one hand there is a desire to preserve the sense and scale of a small town but external forces that transformed and continue to change the small town environment should be recognized. The old commercial district and the sugar mill are symbols of a post-1900’s and pre-1960’s Waipahu; the strip malls along Farrington Highway and the subdivisions behind them speak of an expanding town in the decades from the 1960s to the 1990s. Newer commercial and residential growth are indicative of what Waipahu may become in the 2000s and the urbanizing forces that are shaping the town.

Rather than contributing to small town urban sprawl, Plantation Town Apartments will infill a large vacant lot in an older section of the community. It is consistent with City development policies to promote medium density development along major transportation and transit routes (to help promote existing and future public transportation and perhaps help to reduce the dependence on the automobile), revitalize the old downtown Waipahu commercial area, sustain existing commercial activities on nearby Farrington Highway, and provide clean, safe, affordable housing for Hawaii’s people (Response to DPP comments concerning “small-town development”.

The proposed project will alter the visual environment by replacing an existing vacant lot with two 12-story buildings. This visual impact cannot be avoided. The two buildings have been “fitted” to the site given the existing soil conditions that hinder alternative building placement. In addition, the linear shape of the property constrains building location except for placing structures parallel with the western property line. This placement creates two inline buildings that totally or partially obstructs makai views from 8 to 12 residences on the west and mauka views from some areas below the site.

The Plantation Town Apartments, at 104 feet in height, will be the tallest residential buildings in Waipahu if building height is measured solely from finish grade. The two buildings would rise above the neighboring Ho’olulu and Kamalu towers (7 story, 80 feet in height) and adjoining residences (say a typical height of 25 feet). A visual simulation shows that the two structures do not appear to be significantly taller than the two adjoining structures on Kau’olu Place (Images 5 and 6).

If ground elevation is accounted for in determining overall building height, there are two existing multi-family residential buildings to the west of the project site that are higher than the Plantation Town Apartments. The Waikule Tower is 84 feet in height and Waipahu Tower is 68 feet in height. When ground elevation is accounted for at their respective locations, the Waikule Tower at elevation 51 feet is actually about 135 feet high and the
Image 3. View to the Northwest. Kamalu and Ho'olulu Housing Project on the Left. Plantation Town Apartments on the Right (Photo Simulation by PanaViz).

Waipahu Tower at elevation 45 feet is about 113 feet high. In comparison, the Plantation Town Apartments (at elevation 10 feet) is about 114 feet high.

At 174 feet in height, the former Waipahu Sugar Mill smokestack is the highest structure in Waipahu. Because it is located on "high" ground at elevation 62 feet, its overall height is about 236 feet. The Plantation Town Apartments buildings are well below this height and should not interfere with views of the top of the smokestack from locations throughout Waipahu.

The existing sugar mill structures at the base of the smokestack cannot be seen from the project site thus the project should have no visual impact on the sugar mill structures. The project will not affect close up views of existing mill buildings as seen from Waipahu Street, Waipahu Depot Road, Hans L'Orange Field, and areas above the mill.

An expanded view analysis was performed in response to comments from the Department of Planning and Permitting. Ground level photographs were taken from public locations near the project site as suggested by DPP. The photographs (See Figure 12) show that the Plantation Town Apartments would "stand out" when viewed from certain locations at Waipahu District Park and the northbound lanes of Paliwa Street. The buildings would be less visible from other locations because of existing structures and landscaping in the line of sight towards the project.

Several residential backyards on Nali Street fronting the project site are landscaped with canopy trees that screen the respective dwellings and portions of the back yard from view. These same trees would screen the lower floors of the building and some of the upper level floors from the respective residents. Lots without backyard landscaping will face the exterior wall of the building and forgo their existing makai facing views and some lots will face the rear of the planned recreation buildings. To mitigate visual impacts attributable to the building mass and height, applicant proposes to setback the buildings 50-feet from the west property line. The setback will be landscaped with vertical materials to break up the building façade and add visual interest. Medium height shrubs should help to break up bi-directional lower level views into residences and apartment units. In a historical note, tall grass and shrubs once flourished on the property and makai views to the ocean from residences on the north were non-existent. Only after the State grubbed and maintained the property (as it is now) were such views created.

The buildings will also cast shadows over several of the adjoining residential lots during early morning and late afternoon hours. The number of lots to be affected and their locations will vary seasonally as the angle of the sun rises or falls as it moves across the sky.
ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

The no action alternative would maintain the status quo of the building site and preclude the occurrence of all environmental impacts, short and long-term, beneficial and adverse described in this Assessment. The site would remain vacant until another more economically feasible use is proposed.

B. Alternate Site Plan

Because of development restrictions associated with soft soils along Wailani Stream Channel and a 150 foot building setback from the channel, a site plan with an alternate building configuration but at the same density is not achievable.

C. Alternate Density

The HCDCH has determined that the Plantation Town Apartments at a density of 55 units per acre is an appropriate density for the project site. At one time a low-density development was master planned in consideration of the soft, underlying soils. The ongoing surcharge program has succeeded in compressing site soils where at least one-half of the property can support medium density development.

The proposed density HCDCH goal for the property "to develop the maximum number of housing units" and is the only available State-owned property that is available for development and served by in-place infrastructure.

D. Extend Kau'olu Place to Paiwa Street

Extending Kau'olu Place to intersect with Paiwa Street was considered. It was decided, however, to provide separate residential driveways to Paiwa Street and Kau'olu Place.

An extension would have created a "through" street for vehicles on Paiwa Street and Kau'olu Place. Aligning the street below the location of the two buildings would have separated the buildings from parking areas requiring residents to cross a street to gain their vehicles or their residence.

A street aligned on the mauka side of the Plantation Town Apartments would be too close to the project buildings and adjoining residential lots. Without adequate setbacks on both sides of the street, vehicle traffic and noise would adversely affect public health and safety and that of project residents and residents on Nali Street. A road at this location would have taken up too much of the land area suitable for development (Response to Department of Planning and Permitting and Department of Transportation Services Comments).
PERMITS AND APPROVALS

Land use and construction permits required for the project and responsible authorities are identified below. Additional permits and approvals may be required depending on final construction plans.

PERMIT/APPROVAL

City and County of Honolulu
- 201G Exemptions
- Subdivision
- Conditional Use Permit (Joint Development)
- Grubbing, Grading, and Stockpiling Permit
- Building Permit for Building, Electrical, Plumbing
- Sidewalk/Driveway and Demolition Work
- Permit to Excavate Public Right-of-Way
- Sewer Connection (Approved)
- Certificate of Occupancy
- Water and Water System Requirements for Developments
- Street Usage Permit

State of Hawaii
- Variance From Pollution Controls (Noise Permit)
- NPDES Permits (Various)

AUTHORITY

Honolulu City Council
- Dept of Planning and Permitting
- Dept of Planning and Permitting
- Department of Planning and Permitting
- Department of Planning and Permitting
- Department of Planning and Permitting
- Board of Water Supply
- Department of Transportation Services

Department of Health
- Department of Health
AGENCIES AND ORGANIZATIONS CONSULTED IN THE ENVIRONMENTAL ASSESSMENT PROCESS

The Draft Environmental Assessment for Plantation Town Apartments was published in the Office of Environmental Quality Control's Environmental Notice of March 8, 2006 and March 23, 2006. Publication initiated a 30-day public review period ending on April 7, 2006. The Draft Environmental Assessment was distributed to those agencies and organizations listed below. An asterisk * identifies agencies and organizations that submitted letters or written comments during the review period. All comment letters and responses are found in Appendix D.

State of Hawaii

*Department of Education
*Department of Health
  Environmental Planning Office
*Office of Environmental Quality Control
Department of Land and Natural Resources
*Historic Sites Division
Department of Transportation
  Highways Division

City and County of Honolulu

*Board of Water Supply
*Department of Community Services
  Department of Environmental Services
*Department of Facility Maintenance
*Department of Parks and Recreation
*Department of Planning and Permitting
*Department of Transportation Services
*Fire Department
*Police Department

United States

U.S. Army Corps of Engineers
  *Regulatory Branch

Others

*Hawaiian Electric Company
*Hawaiian Telcom, Inc.
Oceanic Cable
The Honorable Alex Sonson, 35th Representative District
The Honorable Jon Karamatsu, 41st Representative District
The Honorable Rida Cabanilla, 42nd Representative District
The Honorable Clarence Nishihara, 18th Senatorial District
The Honorable Nestor Garcia, Honolulu City Council
Waipahu Neighborhood Board No. 23
Waipahu Business Association
Waipahu Community Association
Waipahu Public Library Public Library (Placement)
Agencies Consulted in Preparing the Environmental Assessment

Housing and Community Development Corporation of Hawaii
Department of Planning and Permitting
   Land Use Branch
      Site Development Division, Wastewater Branch
      Traffic Management Branch

Plantation Town Apartments LLC presented the project to the Waipahu Neighborhood Board on March 23, 2006. A draft of the meeting minutes is appended in Appendix C.

Applicant has briefed elected officials representing Waipahu and will complete briefing by the end of February 2006.

Applicant canvassed the neighborhood informing residents about the project, hearing their concerns, and notifying them of an upcoming presentation to the Waipahu Neighborhood Board. A Notice of Public Information Meeting flyer was mailed to property owners within 300 feet of the project site two weeks prior to the March 23rd meeting of the Waipahu Neighborhood Board.
Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (§11-200-12). The relationship of the proposed project to these criteria is discussed below.

1) **Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;**

   Natural or cultural resources are not found on the property thus there should be no effect on these resources.

2) **Curtails the range of beneficial uses of the environment;**

   The project site has been master planned for residential development since the 1990s and no alternative use has been proposed for the site. The Plantation Town Apartments would help the Housing and Community Development Corporation of Hawaii to complete the State of Hawaii's Kau'olou Project that began with the construction of Mokuola and Hikimoe Streets in 1988.

3) **Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;**

   The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii.

4) **Substantially affects the economic or social welfare of the community or State;**

   The completed project will make available 330 affordable multi-family residential dwelling units. Considering that there is no other State partnered affordable housing project of similar scale at this time on Oahu in general and specifically in the Waipahu area, the project is anticipated to have a substantial beneficial impact in late 2007 when the project is projected to be completed.

5) **Substantially affects public health;**

   Public health will not be adversely affected.

6) **Involves substantial secondary impacts, such as population changes or effects on public facilities;**

   In-place water, sewer, drainage, and utility systems should be able to accommodate the increased demand to be placed by the project on the respective systems.

   A resident population of between 800 to 900 people is projected. The population is expected to be drawn primarily from Waipahu and nearby communities thus a
redistribution of population within the community rather than a net gain in community population is anticipated.

7) Involves a substantial degradation of environmental quality;

Environmental quality will not be degraded. The Plantation Town Apartments project is proposed on a vacant undeveloped lot master planned for residential development. When completed, a well-designed, safe, and secure residential environment will be provided for its residents. The project is anticipated to improve the overall environmental quality of the property on which it is to be built and the neighborhood in which it is located.

8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The project does not involve a commitment for larger actions. The project site is one of the last remaining undeveloped lots comprising the Kau'olou Project.

9) Substantially affects a rare, threatened or endangered species, or its habitat;

Rare, threatened or endangered flora or fauna were not observed on the premises. The lot was previously grubbed, graded, and surcharged and most vegetation consists of ruderal weeds.

10) Detrimentally affects air or water quality or ambient noise levels;

Air and water quality and ambient noise levels should not be adversely affected by the proposed project. Fugitive dust will be raised during site work activities but can be controlled by appropriate dust mitigation measures.

Construction noise will be audible throughout the 16-month construction period. Noise will be most pronounced during the early construction stages and diminish with the advent of interior building activities. A pile driver will be used to create pile caps on which the structure will be supported and noise from this equipment will be audible in the surrounding area for 2-3 months.

Surface runoff will be detained on-site before being discharged into the municipal drainage system. On-site detention would allow sediment and other pollutants to fall out of the runoff stream and let runoff water percolate into the ground.

The completed project is not anticipated to adversely affect air and water quality in the long-term.

11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

A portion of the project site along Waiani Stream Channel is identified as a Floodway. Construction is not planned for the area bearing this designation except for at-grade parking and a vegetable garden. The proposed project is not anticipated to raise the regulatory flood height (11 feet).
12) Substantially affects scenic vistas and view planes identified in county or state plans or studies, or,

No significant scenic vistas and view planes have been identified on the property or occurring across the property.

13) Requires substantial energy consumption.

Electrical energy is required for the proposed use. Electrical requirements will be determined during the design stage of the project.
REFERENCES

American Fact Finder. 2000 Census Data.
http://factfinder.census.gov/home/saff/main.html?_lang=en


Data@Work. October 2005. Waipahu Affordable Condominium Market Feasibility Study.


Department of Planning and Permitting, City and County of Honolulu. December 2002. Central Oahu Sustainable Communities Plan.

Department of Planning and Permitting, City and County of Honolulu. October 1986. Land Use Ordinance. Ordinance No. 86-96 (As Amended).

Department of Planning and Permitting, City and County of Honolulu. Zoning Map No. 8 Pearl City to West Loch.


APPENDIX A

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PLANTATION TOWN APARTMENTS
Phase I Environmental Site Assessment

PLANTATION TOWN APARTMENTS
TMK 9-4-017:058
WAIPAHU, OAHU, HAWAII

Prepared for:
Gerald Park Urban Planner
1221 Kapiolani Boulevard
Honolulu, Hawaii 96814

Prepared by:

January 2006
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RCRIS  Resource Conservation and Recovery Information System
ROD    Record of Decision
RPAD   Real Property Assessment Division
SHWS   State Hazardous Waste Sites
SPILLS DOH HEER Release Notifications
SQG    Small Quantity Generator
SSTS   Section 7 Tracking Systems
SWLF   State Permitted Solid Waste Landfills, Incinerators, or Transfer Stations.
TMK    Tax Map Key
TRIS   Toxic Chemical Release Inventory System
TSCA   Toxic Substances Control Act
TSDF   Treatment, Storage, and Disposal Facility
UIC    Underground Injection Control
UMTRA  Uranium Mill Tailings Sites
US BROWNFIELDs United States Brownfields
USENG CONTROLS United States Engineering Controls Sites List
USEPA  United States Environmental Protection Agency
US INST CONTROL United States Sites with Institutional Controls
USGS   United States Geological Survey
UST    Underground Storage Tank
VCP    State Voluntary Response Program
WRCC   Western Regional Climate Center
Section 1  Introduction

1.1 Project Background

Element Environmental, LLC (EE) was contracted by Gerald Park Urban Planner to conduct a Phase I Environmental Site Assessment (ESA) for a property located in Waipahu, O‘ahu, Hawai‘i. The project site consists of an undeveloped property with Tax Map Key (TMK) number (9) 4-017:058 (hereafter referred to as the “Property”). This Phase I ESA was performed in accordance with the scope of services provided in their fee proposal dated November 10, 2005.

We understand that the ESA is being undertaken because Plantation Town Towers, LLC proposes to develop a multi-family residential housing project on the Property. The development would be part of the Kao‘ulu Project, a 22.5-acre mixed-use development of the State of Hawaii. The purpose of the project is to provide the maximum number of affordable housing units using the least amount of State resources. The Property is the largest remaining undeveloped lot in the Kao‘ulu Project. The surrounding area has been developed for a variety of housing types, civic, and educational facilities. The Property is master planned for residential housing but its development has been hampered in part by soft underlying soil conditions. After 25+ years of surcharging the site (spreading dry fill material over the site to induce compressing the underlying soft soils) the ground is considered suitable for development. Two rectangular shaped buildings (197’ X 57’ rounded) will be sited on the north and west half of the Property parallel with the respective property lines. Each building has a footprint of approximately 9,740 square feet with a total floor area of 115,534 square feet. The two 12-story buildings will rise approximately 104 feet in height measured from existing grade. One hundred sixty five (165) residential units are planned for each structure. Vehicle ingress and egress is proposed at two locations. Access to the Paiwa Tower (that nearest to Paiwa Street) will be from Paiwa Street near its intersection with Hilihua Place. Access to the Kao‘ulu Tower will be from Kao‘ulu Place. Uncovered, at-grade parking for 382 resident vehicles is proposed. Resident parking is arrayed on the southern and eastern half of the lot where subsurface soil conditions preclude excessive building loads. (Park, 2006)

1.2 Project Objective

The objective of the ESA was to identify "recognized environmental conditions" that may exist on the Property. The American Society of Testing and Materials (ASTM) Practice E 1527-05,
Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, defines recognized environmental conditions as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The extent of research to identify recognized environmental conditions is limited by the scope of services.
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY SEE FRAME(S) IMMEDIATELY FOLLOWING
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<td>UIC</td>
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<td>Uranium Mill Tailings Sites</td>
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Section 1  Introduction

1.1 Project Background

Element Environmental, LLC (EE) was contracted by Gerald Park Urban Planner to conduct a Phase I Environmental Site Assessment (ESA) for a property located in Waipahu, O‘ahu, Hawai‘i. The project site consists of an undeveloped property with Tax Map Key (TMK) number (9) 4-017:058 (hereetofore referred to as the “Property”). This Phase I ESA was performed in accordance with the scope of services provided in our fee proposal dated November 10, 2005.

We understand that the ESA is being undertaken because Plantation Town Towers, LLC proposes to develop a multi-family residential housing project on the Property. The development would be part of the Kau‘olu Project, a 22.5-acre mixed-use development of the State of Hawaii. The purpose of the project is to provide the maximum number of affordable housing units using the least amount of State resources. The Property is the largest remaining undeveloped lot in the Kau‘olu Project. The surrounding area has been developed for a variety of housing types, civic, and educational facilities. The Property is master planned for residential housing but its development has been hampered in part by soft underlying soil conditions. After 25+ years of surcharging the site (spreading dry fill material over the site to induce compressing the underlying soft soils) the ground is considered suitable for development. Two rectangular shaped buildings (197' X 57' rounded) will be sited on the north and west half of the Property parallel with the respective property lines. Each building has a footprint of approximately 9,740 square feet with a total floor area of 115,534 square feet. The two 12-story buildings will rise approximately 104 feet in height measured from existing grade. One hundred sixty five (165) residential units are planned for each structure. Vehicle ingress and egress is proposed at two locations. Access to the Paiwa Tower (that nearest to Paiwa Street) will be from Paiwa Street near its intersection with Hilihua Place. Access to the Kau‘olu Tower will be from Kau‘olu Place. Uncovered, at-grade parking for 382 resident vehicles is proposed. Resident parking is arrayed on the southern and eastern half of the lot where subsurface soil conditions preclude excessive building loads. (Park, 2006)

1.2 Project Objective

The objective of the ESA was to identify “recognized environmental conditions” that may exist on the Property. The American Society of Testing and Materials (ASTM) Practice E 1527-05,
Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, defines recognized environmental conditions as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The extent of research to identify recognized environmental conditions is limited by the scope of services.
Section 2  Scope of Services

The scope of services conducted for this Phase I ESA consisted of the following tasks:

- Site Reconnaissance - EE staff experienced in conducting hazardous material surveys and environmental assessments performed a visual reconnaissance of the Property and surrounding areas. Environmental conditions and current activities on the Property and adjoining properties were observed. Visual observations were made to establish an inventory of potential contaminant sources on and adjoining the Property. Photographs were taken to document observed conditions.

- Records Review - Reasonably ascertainable information and public records about the Property and surrounding areas were requested or obtained from federal, state and local government agencies. This information was used to assess whether current or past usage of the Property or the immediate surrounding areas may have caused or increased the potential for environmental contamination.

The records review was based on ASTM Practice E 1527-05 and consisted of the following:


- The subject property, adjacent properties, and properties within a ¼-mile radius search for Resource Conservation and Recovery Act (RCRA) small or large quantity generators of hazardous waste (SQG and LQG); and state registered underground storage tank sites (UST).

- The subject property, adjacent properties, and properties within a ½-mile radius search for Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites; CERCLIS No Further Remedial Action Planned sites (NFRAP); RCRA permitted treatment, storage, and disposal facilities (TSDF); federal institutional control/engineering control registries (US ENG and INST CONTOLS); state leaking USTs (LUST); state permitted solid waste landfills, incinerators, or transfer stations (SWLF); state institutional control/engineering control registries (INST CONTOLS); state voluntary response program sites (VCP); and state brownfields sites (BROWNFIELDS).

- The subject property, adjacent properties, and properties within a 1-mile radius search for federal National Priorities List (NPL or Superfund) sites including proposed and
delisted sites; RCRA Corrective Actions (CORRACTS) and associated TSDF; and State Hazardous Waste Sites (SHWS).

EE also conducted a search for historic aerial photographs, United States Geological Survey (USGS) topographic maps, military photomaps, ownership/lease and land use records, and local street maps and directories.

Requests were made to the Honolulu Fire Department and Local Emergency Planning Committee (LEPC) for hazardous materials spill incident records and reporting records to identify past releases and potential future release concerns on or near the Property.

Public agency staff and other knowledgeable persons were interviewed regarding past and present site, and adjoining property usages in order to supplement the record review.

- **Evaluation, Analysis and Report** - Information collected during the above activities was evaluated and analyzed.

This ESA report summarizes our findings and presents our conclusions. The ESA was performed in accordance with ASTM Practice E 1527-05; no exceptions to or deletions from the Practice were made.
Section 3  Site Description

3.1 Location and Topography
The project site is located in Waipahu, O‘ahu, Hawai‘i (Figure 3-1). The Property consists of one parcel of land, identified as TMK number (1) 9-4-017:058 (Figure 3-2). The Property is currently undeveloped.

The topography of the area slopes gently from the north to the south/southwest, with an elevation of approximately 16 feet above mean sea level.

3.2 Site Improvements
There are no current improvements on the Property. The Property is grassed with some brush and weeds. The Property is fenced along its boundaries. There are two access driveways, one along Pa‘iwa Street and another along Kau‘olu Place.

According to Mr. Gerald Park, the State of Hawaii initiated a ground surcharge program on the Property in the mid 1970s due to ground settlement and existing compressible soils. The ground surcharge program consisted of placing up to 8 feet of soil fill on top of the Property.

3.3 Environmental Setting

3.3.1 Geology
The Hawaiian Archipelago is a chain of seamounts and islands in the North Pacific extending 1,616 miles west by northwest from the largest island of Hawai‘i. Volcanic rocks are the dominant rock type and consist of basaltic flows, caldera and dike complexes, and pyroclastics. Sediments include limestone reefs and dunes, beach and dune sands, and alluvium deposited near present day and ancient shorelines, typical of tropical to subtropical atoll cycles. Some ancient limestone reefs and dunes are found inland due to climatic and sea level fluctuations.

The island of O‘ahu, the third largest of the Hawaiian chain, was formed by two volcanoes, Ko‘olau and Wai‘anae. The older Wai‘anae volcano was formed from a caldera and rift zones found on the western portion of the island. These flows range from 2.5 to 3.1 million years old and are overlain by the 1.8 to 2.7 million year old flows of the Ko‘olau volcano (Doell and Dalrymple, 1973).
Rocks of the Koʻolau volcano are found on the eastern and northeastern portion of the island and consist mostly of hundreds of thin basalt flows three to nine feet thick. The Koʻolau flows erupted from a main caldera in the vicinity of present day Kailua, along with two main rift zones extending northwest and southeast of the caldera. Following these main volcanic events, stream erosion dissected the island and created two belts of mountain ranges, the northwest oriented Waiʻanae Range on the west side of the island and the southeast oriented Koʻolau Range on the east side of the island.

Less than 600,000 years ago during a time known as the Pleistocene period, a third and violent series of approximately fifty eruptions in the south interrupted the erosional period. Tuff and pyroclastics known as the Honolulu Formation were deposited by these eruptions as recent as 12,000 years ago (Lanphere and Dalrymple, 1980). Fringing and barrier coral reefs and beach sediments (lithified calcareous dunes) formed during the later volcanics and are interlayered with rocks of the Honolulu Formation. Deposition of calcareous sediments continued through the Pleistocene period but was greatest during a warm, interglacial period around 500,000 years ago.

Limestone reefs formed during this period, when sea level was about 120 feet higher than present, are now found inland as "emerged" reefs (Stearns, 1985). The constantly fluctuating sea level during the Pleistocene period created shore platforms and cut notches into ancient reefs and lithified dunes leaving behind evidence of up to 35 high sea level stands (Stearns, 1985). Examples of ancient shorelines are found throughout the Hawaiian Islands, but are most prominent on Oʻahu.

The Property lies on the coastal plain just above the Waipio Peninsula which extends into Pearl Harbor. Pearl Harbor is essentially a drowned river system with several branches. The Pearl Harbor re-entrant was caused by the banking of the Koʻolau lavas against the older Waiʻanae Range. Wells near Pearl Harbor penetrate over 1,000 feet of alternating beds of limestone, tuff, alluvium and marine clays that buried the original Koʻolau land surface. During the 100-foot Kaena stand of the sea the Pearl Harbor re-entrant was a broad unsheltered bay. So much silt was brought into the harbor that the corals there were suffocated. Thus a continuous reef was not built, but chiefly a fill of gravel and mud was emplaced. While the sea level was about 350 ft lower than the present shoreline, Salt Lake crater erupted and deposited several feet of well bedded ash over the area. When the sea rose to a height 25 feet above present sea level oyster beds flourished on the drowned interstream divides, and thin coral reefs grew in stretches of clear water. Today the oyster beds, reefs, and beach deposits are well exposed on the peninsulas and up into Waipahu (Stearns, 1985).
3.3.2 Hydrogeology

The principal reservoirs of groundwater in O‘ahu are in basaltic lava flows that were extruded above sea level. Lava extruded above water is generally thinly bedded, highly clinkery, and highly permeable. Because the Wai‘anae and Ko‘olau volcanic domes have sunk 1,200 feet or more (Macdonald and Abbott, 1970), these subaerial flows generally are thinly bedded, highly clinkery, and highly permeable. In contrast, flows extruded in water are likely to be more massive, less clinkery, and less permeable. The regional permeability of lava, whether high or low initially, is significantly reduced when the formations are intruded by dikes. The reduction in permeability is a function of the number and volume of the dike intrusions and the geometry of the dikes (Takasaki and Mink, 1985).

Directly beneath the Property is a basal, unconfined, flank aquifer. This basal aquifer contains fresh water and is currently used as drinking water source. The aquifer has been determined to be irreplaceable and has a high vulnerability to contamination (Mink and Lau, 1990). The depth to groundwater is estimated to be approximately 8 feet below ground surface based upon available well data from the surrounding area (EDR, 2005). Artesian conditions do exist on the Property as evidenced by a natural spring that exists on the northern boundary. Direction of regional groundwater flow is south-southeast towards Pearl Harbor (EDR, 2005).

The primary source of recharge to this volcanic basal aquifer is from infiltration of rainfall and stream runoff that occurs in the inland portions of the Ko‘olau range. The hydraulic head levels measured in these volcanic basal aquifers result from the alluvial material in the caprock retarding the seaward flow of freshwater. In the inland portions of Pearl Harbor around the vicinity of the project area, basal groundwater can be observed discharging directly to the ocean via a series of springs through localized breaches in the caprock.

The State of Hawaii Department of Health established the Underground Injection Control (UIC) line to regulate the injection of wastewater into the ground in order to protect Hawaii’s underground drinking waters from contamination. The UIC line is used to determine the level of protectiveness afforded an aquifer as reflected by water quality standard criteria. In general, wastewater injection is prohibited mauka (above) of the UIC line, but is allowed makai (below) of the UIC line. Therefore, for sites located above the UIC line, the more protective drinking water standards are used as the basis for protectiveness. For sites located below the UIC line, the saltwater quality standards are used as a basis for protectiveness (State of Hawaii DOH, 1992). The Property lies mauka of and is thus above the UIC line.
3.3.3 Surface Hydrology

A search of the Federal Emergency Management Agency (FEMA) flood insurance maps indicated that the majority of the Property lies outside of the 500 year flood zone (Zone X) (DPP, 2005). The southwestern portion of the Property does lie within the 100 year flood zone and has a base flood elevation of 11 feet. Surface runoff on the Property follows the site topography and flows to the south. The Property is bordered to the south by the Wailani Stream. The stream is confined by a rectangular concrete channel in the vicinity of the Property. Construction of the concrete channel between Paiwa Street and Farrington Highway was completed in 1995 (EPS, 2001).

Three natural springs existed on the Property. As part of the State's ground surcharge program, the three springs were capped and drained by a subdrain system. Presently, one of the capped springs at the northern end of the Property is leaking. Water from the leaking spring forms a pond that is approximately 200 feet by 10 feet in area. Several federal wetlands lie within 1 mile of the Property along West Loch and Middle Loch of Pearl Harbor to the south-southwest, and southeast (EDR, 2005).

3.3.4 Soils

The soil in the vicinity of the Property is classified as fill land (FL). FL consists of areas filled with materials dredged from the ocean or hauled from nearby areas, garbage, and general materials from other sources (Foote, 1972). As previously mentioned, the State imported approximately 8 feet of soil fill on the Property as part of their ground surcharge program.

3.3.5 Climate

The climate in the region of Waipahu is warm and relatively dry. Rainfall varies from approximately 3 inches per month during the winter, to less than 1 inch per month during the summer. Mean annual rainfall at the Property is approximately 19 inches. The average daily minimum and maximum temperature in January is 63°F and 81°F respectively, and the average daily minimum and maximum temperature in August is 71°F and 89°F respectively. The mean annual temperature is approximately 85°F (WRCC, 2004).
Section 4  History of Site Uses

Investigation into the history of the Property and adjoining properties was accomplished by reviewing historical aerial photographs, topographic maps, and ownership and land use records. The following summarizes the site history and findings of each available record search.

4.1 Topographic Maps

USGS topographic maps dated 1959, 1968, 1983 and 1998; a U.S. Army Military Survey dated 1909-1913; and a USGS Hawaiian Territorial Survey dated 1927-1930 were reviewed for indication of topographic and land use changes leading to potential environmental impact on the project site and its surrounding areas.

From the earliest available records, the Property appears to be undeveloped. Wailani Stream is shown in the vicinity of the Property. Immediately surrounding the Property to the north is Waipahu Town. The then active Oahu Sugar Mill is located approximately one mile west of the Property (USGS 1909-1913, USGS 1927-1930) (Figure 4-1). The Oahu Railway runs to the south of the Property. The areas surrounding Waipahu Town are marked as sugarcane plantation land.

By the 1950's, Farrington Highway is in place south of the Property and Nalii Street is in place north of the Property (USGS 1959) (Figure 4-2). Waipahu Town appears to be further developed. The Property remains undeveloped.

By the late 1960's the H1 Freeway is under construction north of Waipahu Town and the Property (USGS 1968). The Waipahu area appears to have undergone further development since the 1950's. Mokuola Street and Paiwa Street are built and border the Property to the west and east, respectively. The Waipahu Neighborhood Park is built and borders the Property to the south. The Wailani Stream appears to have been channeled between the Property and the Neighborhood Park.

Available topographic maps for the 1980's and 1990's show little change to the general vicinity of the Property (Figure 4-3). Kau'olu Place appears to have been built during this time. (USGS 1983, USGS 1998).

The maps did not show any significant change in the ground elevation in the region or any indication of potential environmental issues in the immediate vicinity of the Property.
4.2 Aerial Photographs

Readily available aerial photographs from the University of Hawaii, Hamilton Library Map Room and R.M Towill Corporation were reviewed for historical and present land use patterns on the Property and in the vicinity of the Property. Aerial photographs from 1949, 1951, 1955, 1959, 1968, 1969, 1972, 1973, 1974, 1981, 1982, 1985, 1993, 1995, and 2000 were examined. The aerial photographs generally reflected the changes in the vicinity of the Property observed in the topographic maps (Section 4.2). A summary of the findings is provided below.

- The earliest available aerial photographs, from 1949, 1951, 1955 and 1959, (Figure 4-4) show the Property located approximately one mile west of the then active Oahu Sugar Mill. In the aerial photograph from 1949, it appears that a dirt road transects the Property and there may be four (4) small structures present on or in the immediate vicinity of the Property. Waialani Stream runs near the southern boundary of the Property. The aerial photographs from 1951 thru 1959 show the Property as generally undeveloped and the four (4) structures seen on the 1949 photograph are no longer present. A few new structures are shown near the northeastern end of the Property. The Waialani Stream path appears to have been altered slightly in the vicinity of the Property. Nali Street, Mokuola Street, and Paliwa Street have not been built. Farrington Highway runs to the south of the Property. It appears that a large portion of the area surrounding Waipahu town consists of land used for agricultural purposes.

- The aerial photographs from 1968 and 1969 (Figure 4-5) show the Property undeveloped. Paliwa and Nali Streets to the north and Mokuola Street to the west have been built with residential homes surrounding the Property along these streets. The Waipahu Neighborhood Park is shown bordering the Property to the south separated by the Waialani Stream. Commercial developments are shown to the south along Farrington Highway.

- The aerial photographs from 1972, 1973, and 1974 show the Property containing a few dirt trails and what may be small agricultural type plots. The aerial photograph from 1974 does show some change in topography immediately south of the Property in the vicinity of the present day Civic Center. Further commercial developments are shown along Farrington Highway.

- The aerial photographs from 1981, 1982, and 1985 do not show significant changes to the Property or surrounding areas.
• The aerial photographs from 1993 and 1995 (Figure 4-6) show the development of Kau’ola Place. The Civic Center, Waipahu Library, and the Kamehameha Elderly Housing Apartment complex are shown to the south of the Property. Dirt trails are still present on the Property. The Property does appear to be vegetated.

• The most recent aerial photograph from 2000 (Figure 4-7), shows the Property relatively unchanged from the 1993 photograph. Further development is shown immediately to the south of the Property. The Ho'olulu Elderly Housing apartment complex and the Harry and Jeanette Weinberg Hale Kuha’o building have been built. No other major changes are visible in the vicinity of the subject Property.
4.3 Sanborn Fire Insurance Maps

The Sanborn Map® Collection consists of a uniform series of large-scale detailed maps, dating from 1867 and depicting the commercial, industrial, and residential sections of cities. The maps were designed by surveyor D.A. Sanborn in 1866 to assist fire insurance agents in determining the degree of hazard associated with a particular property. Sanborn Maps® illustrate in outline form the site, size, shape, construction and building material of dwellings, commercial buildings, and factories. Details of buildings include fire walls, the location and number of windows and doors, style and composition of roofs, wall thickness, cracks in exterior walls, and makes of elevators. The maps also indicate building use, sidewalk and street widths, layout and names, property boundaries, distance between buildings, house and block numbers, location of water mains, hydrants, piping, wells, cisterns, and fuel storage tanks.

Environmental Data Resources, Inc. was subcontracted to conduct a review of a complete collection of Sanborn fire insurance maps. Fire insurance maps were identified for the following years: 1957, 1981, 1987, 1990 and 1991. The fire insurance maps do not show development on the Property. The earliest map from 1957 does indicate some scattered buildings near the western end of the Property along Niau Lane. The later maps from 1981 to 1991 show the area to the west of the Property reconfigured. The alignment of Niau Lane has been changed and Property is now bordered to the north and west by Paiwa Street and Nalii Street. Residential homes are shown bordering the Property along these streets. Copies of the fire insurance maps are included in Appendix B of this report.

4.4 Ownership and Land Use Records

Ownership history for the Property was obtained from historical records maintained by the City and County of Honolulu (CCH) Real Property Assessment Division (RPAD). The Property occupies approximately 7.411 acres of land identified as TMK Zone 9 Section 4 Plat 17 parcel 58 (9-4-017:058). Real property records dating back to 1950 are kept at the CCH RPAD. The records indicate that parcel 58 was originally established in 1993 and was subdivided from parcel 1. The parcel originally consisted of 6.571 acres with an additional 0.659 acres added from parcel 1 in 1996. The original owner was listed as the Hawaii Housing Authority. The Hawaii Housing Authority was subsequently consolidated into the Housing and Community Development Corporation of Hawaii, the current owner.

The earliest records from 1950 indicate that parcel 1 consisted of 63.563 acres and was owned by the John Ii Estate, Ltd. Parcel 1 was sold to the Hawaiian Pineapple Company Ltd. in 1952.
ownership of the parcel changed again in 1954 when Hung Wai Ching, Richard K.W. Tom and Kenneth K. Nishikawa assumed ownership. At the time of the transfer in 1954, the parcel consisted of 59.717 acres. The ownership changed to just Hung Wai Chang and Kenneth K. Nishikawa in 1958. In 1965, Crown Waipahu, Inc. assumed ownership of parcel 1, which consisted of 22.702 acres. Parcel 1 was then purchased by the Hawaii Housing Authority in 1974 with 22.259 acres of land being transferred.

Available building records from the CCH Department of Planning and Permitting (DPP) were also gathered. The only building permit related to parcel 58 was a permit for electrical work along the Waipahu drainage canal in 1994.

The ownership and land use records do not indicate past primary or sublease holders or businesses that raise any significant or specific potential for environmental concerns. Copies of the real property and building records obtained are provided in Appendix B of this report.

4.5 Previous Environmental Investigations

Two previous Phase I ESAs have been conducted for two parcels located within ¼-mile of the Property. A summary of the findings from these Phase I ESA reports is as follows:

- A Phase I ESA was completed for the Rehabilitation Hospital of the Pacific Independent Living Apartment Complex located on a portion of TMK parcel 9-4-017:055. This site is located along Kau’olu Place approximately 1/8-mile southwest of the Property. The report did not identify any recognized environmental concerns for the site or the Property. The report did report that fill was brought onto the site as part of the surcharge program. The site and surrounding areas were also identified to have been used for agricultural farming. (Rehabilitation Hospital, 1996)

- A Phase I ESA was completed for the Adult Day Health Care Center site located on TMK parcel 9-4-017:051. The site is located adjacent to the intersection of Mokuola and Hikimoe Streets approximately ¼-mile southwest of the Property. The report did not identify any recognized environmental conditions for the site or the Property. Interviews with persons knowledgeable with the area revealed that the vicinity surrounding the site including the Property was utilized in the early 1900's for subsistence agriculture with crops such as rice and watercress. (Environmental Planning Solutions, 2001)
Section 5  Site Reconnaissance

EE staff conducted the site reconnaissance on January 13, 2006 to observe current site uses and to identify recognized environmental conditions and potential sources of environmental concern. The site reconnaissance consisted of a visual survey of the subject property and adjacent properties. Photographs taken during the site reconnaissance are provided in Appendix D.

5.1 Observations

There are two main entrance driveways to the Property, one from the northeast off of Paiwa Street and one from the west off of Kau’olu Place. The Property is bounded to the north by residential homes along Nalii Street, to the east by Paiwa Street, to the south by Wailani Stream, and to the east by Kao’ulu Place. The eastern, southern, and western boundaries of the Property are enclosed by a chain link fence with gates at the entrance driveways. The northern boundary is enclosed by various types of walls and fences that are part of the residential homes. The topography of the Property is relatively flat with a slight slope to the south-southwest towards the concrete channel containing the Wailani Stream.

The following were observed on the Property (Figure 5-1):

- The entire Property is grassed with some amounts of weeds and brush. It appeared that the vegetation in the eastern two-thirds of the Property was recently cleared. The vegetation in the western third was fairly thick and waist high. There were no structures observed on the Property.
- Small amounts of concrete rubble and a fire extinguisher were observed on the Property behind the first home along Nalii Street (Photo 4, Appendix D).
- Three natural springs existed on the Property. As part of the State’s ground surcharge program, the three springs were capped and drained by a subdrain system. Presently, one of the capped springs at the northern end of the Property is leaking. Ponding water from the leaking spring extended approximately 200 feet in an east to west direction from behind the third home to the sixth home along Nalii Street. The width of the ponding water was approximately 10 feet. The ponding area is being used to cultivate vegetables such as taro and eggplant by the local residents along Nalii Street (Photo 5, Appendix D). A drainage swale transected the ponding area in a north-south direction and extended across the Property. Some standing water was observed in the northern end of the swale. An automobile tire and scrap sheet metal were observed in the swale.
(Photo 6, Appendix D). A few pieces of rusted piping and fencing material were observed adjacent to the ponding area behind the third home.

- Two debris piles were observed in line with the sixth home along Nalii Street. Pile 1 contained tree branches, a wooden box, a coffee can, plastic potting containers, a 1-gallon white plastic unlabeled container that was full with liquid, and a 1-gallon white plastic empty container that was exactly the same as the other unlabeled container and was labeled “Citgo Antifreeze Coolant” (Photos 8 & 9, Appendix D). Pile 2 contained tree branches, wooden benches, a plastic bin, and four (4) automobile tires with rims (Photo 10, Appendix D). In between the two piles were some scrap metal parts.

- A debris pile was observed in line with the seventh home along Nalii Street. Pile 3 contained tree branches and small boulders (Photo 11, Appendix D). The ground surface just south of Pile 3 appeared to be slightly elevated with some evidence of debris on the surface indicating that there may be small amounts of debris buried in the vicinity.

- An engine block, car axle, scrap metal, and a shower tub were observed on the Property behind the eighth home along Nalii Street (Photo 12, Appendix D).

- An empty 55-gallon metal drum was observed on the Property behind the ninth home along Nalii Street. The drum was rusted with holes. No evidence of staining was observed beneath the drum (Photo 13, Appendix D).

- Rubber hoses, scrap metal, a car battery, and an empty 55-gallon metal drum were observed on the Property behind the tenth home along Nalii Street. The drum was rusted with holes. No evidence of staining was observed beneath the drum. The drum was labeled “Citgo Supergard 10 10-30, 20813” (Photos 14 & 15, Appendix D).

- Scrap metal, a car battery, an engine block, and an empty 55-gallon plastic drum were observed on the Property behind the eleventh home along Nalii Street. The plastic drum was in good condition with no holes and no cover. The drum was not labeled. No evidence of staining was observed beneath the drum (Photos 16, 17 & 20, Appendix D).

- A debris pile was observed near the entrance gate from Kauolu Place behind the twelfth home along Nalii Street. The debris pile contained car parts, an engine block, car seats, a lawn mower, rubber tire, empty plastic containers (1-gallon bleach and salsa), an empty 5-gallon bucket, and an empty and rusted 5-gallon metal container.
No staining was observed on top of the pile. Since the pile was somewhat buried, the bottom of the pile could not be inspected (Photos 18 & 19, Appendix D).

- Two debris piles were observed in the brush in the middle of the western end of the Property in line with the eleventh and twelfth homes along Nalii Street. Pile 4 contained an empty 5-gallon bucket, rubber sheeting, and an automobile tire and rim (Photo 22, Appendix D). Pile 5 contained concrete rubble, small boulders, and rubber hosing (Photo 23, Appendix D).

- Three electrical utility poles were observed to run along the southwestern end of the Property. The poles supported overhead electrical lines. None of the poles contained pole mounted transformers. The electrical lines originated from the adjacent Waipahu Neighborhood Park (Photo 24, Appendix D).

- Three automobile tires were observed along the fence line in the southwestern corner of the Property. One car battery was also observed in between two of the electrical utility poles (Photo 27, Appendix D).

- PVC piping both exposed and partially buried were observed throughout the southern and western halves of the Property. The PVC piping appeared to have been used for irrigation of small agricultural plots (Photo 26, Appendix D). Historic evidence of small agricultural plots was observed in the western half of the Property. Wooden boards used to separate plots were observed in the ground surface. Three former intake pipes approximately 3-inches in diameter were also observed hanging over the concrete channel into Wailani Stream (Photo 28, Appendix D).

- Two sewer manholes were observed along the southern boundary adjacent to the concrete channel (Photo 29, Appendix D).

- One former intake pipe was observed hanging over the concrete channel into Wailani Stream near the eastern end of the Property (Photo 30, Appendix D).

5.2 **Adjacent Properties**

The Property is bordered to the north by single family residential homes along Nalii Street. The Property is bordered to the east by Paiwa Street with single family residential homes across of the street. The Wailani Stream flowing within a rectangular concrete channel borders the Property to the south. Across of the stream is the Waipahu Neighborhood Park. The park contains outdoor tennis and basketball courts, an outdoor playground area, a baseball field, a swimming pool, and
a gymnasium. The Property is bordered to the east by Kau’olū Place and the Kamalu and Ho’olūlu elderly housing apartment complexes. The apartment complexes are seven (7) stories high. Adjacent to these apartments to the west are the Leeward Civic Center, the Waipahu Public Library, and the Harry and Jeanette Weinberg Foundation Hale Kuahā’o building. Observations made of the adjacent properties did not reveal activities of environmental concern.

### 5.3 Interviews

An interview regarding current and historic uses on the Property was conducted on-site with Mr. Gerald Park. Mr. Park has been working as a consultant for the State of Hawaii for the development of the Crown Properties, which includes the Property, for the past fifteen (15) years and is knowledgeable of the Property’s history. Mr. Park confirmed that no building development has ever occurred on the Property. The Property currently does not have water, sewage, or electrical service connections. The Property has also never been used for activities that may have used, stored, or generated hazardous materials and petroleum products.

Mr. Park indicated that soil fill was brought onto the Property starting from the mid 1970s when the State obtained ownership of the Property. The State initiated a ground surcharge program on the Property due to ground settlement and existing compressible soils. Up to eight (8) feet of soil fill was placed on the Property since the inception of the program. Mr. Park did not know the origin of the soil fill. Three natural springs were also known to exist on the Property. As part of the ground surcharge program, the three springs were capped and drained by a subdrain system. Presently, one of the capped springs at the northern end of the Property is leaking.

Mr. Park also indicated that the Property was utilized by the local area residents for gardening during the 1970s to the late 1990s at which time the Property was fenced. Small agricultural plots were set up and irrigated with water from the Wailani Stream. Water from the stream was pumped into a piping network that was laid out over the Property. Mr. Park did not know if any of the residents had used pesticides or herbicides on the agricultural plots.

During recent site visits, Mr. Park did observe some surface debris on the Property. Mr. Park was unsure if there was any additional debris illicitly buried on the Property. A complete site interview form is provided in Appendix C.
Section 6  Records Review

Research for available environmental documents and records included utilizing the services of a commercial database research company, submitting written requests for public information to government agencies, telephone interviews with regulatory agency personnel, and reviewing databases and listings maintained by regulatory agencies on government websites.

The purpose of the records review was to assess the potential presence of environmental contamination or future release of hazardous materials or substances on the Property as a result of activities conducted on and around the Property. The record search was limited to information readily available from public sources and EE’s previous project experiences. The public records are updated regularly by the individual agencies but may not be completely up to date.

Records reviewed during this ESA include those maintained by the following agencies:

- United States Environmental Protection Agency (USEPA)
- State of Hawaii, Department of Health (DOH)
- City and County of Honolulu Real Property Tax Division (CCH RPAD)
- City and County of Honolulu Department of Planning and Permitting (CCH DPP)
- Honolulu Fire Department (HFD)
- Local Emergency Planning Committee (LEPC)

Environmental Data Resources, Inc. (EDR), an independent environmental information service provider, was subcontracted to conduct a search of government records for the project site and surrounding areas within specified search radii (Section 2). The EDR report dated December 23, 2005 is provided in Appendix A of this report. A summary of the results of the records search and review is provided in Table 6-1 and the discussion that follows.

EE staff also conducted research of property records at the CCH RPAD and researched building permit records at the CCH DPP. Discussions of the record-search results are provided in Sections 4.4 and 6.3. Copies of property records are provided in Appendix B.

Written requests for information about the Property were submitted to DOH, HFD and LEPC. Discussions of search results from these agencies are provided in Sections 6.2, 6.4 and 6.5 respectively. Copies of the request letters submitted to the various agencies and their responses are provided in Appendix C.
6.1 U.S. Environmental Protection Agency

U.S. EPA database and records reviewed include:

- National Priority List (NPL) sites, which are sites that pose the greatest immediate threat to human health or the environment under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or "Superfund") and includes proposed and delisted sites
- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites, which are sites that are under consideration for listing on the NPL
- CERCLIS No Further Remedial Action Planned (NFRAP) sites
- Resource Conservation and Recovery Act (RCRA) Corrective Action (CORRACTS) sites and associated permitted treatment, storage, and disposal facilities (TSDF)
- RCRA permitted treatment, storage, and disposal facilities (TSDF)
- Federal institutional control/engineering control registries (US ENG and INST CONTROLS)
- RCRA small (SQG) or large quantity hazardous waste generators (LQG)
- Emergency Response Notification System (ERNS) of spills

The following are ASTM supplemental federal records also reviewed by EDR:

- CERCLA Liens (NPL LIENS) sites
- CERCLA Consent Decree (CONSENT) sites
- CERCLA Record of Decision (ROD) sites
- Federal Brownfields (US BROWNFIELDS) sites
- Facility Index System/Facility Identification Initiative Program Summary Report (FINDS) sites
- Hazardous Materials Information Reporting System (HMIRS) sites
- Material Licensing Tracking System (MLTS) sites
- Mines Master Index File (MINES) sites
- Uranium Mill Tailings (UMTRA) sites
- Open Dump Inventory (ODI) sites
- Polychlorinated biphenyl (PCB) Activity Database System (PADS) sites
- Department of Defense (DOD) sites
- Formerly Used Defense sites (FUDS)
- RCRA Administrative Action Tracking System (RAATS) sites
- Toxic Chemical Release Inventory System (TRIS) sites
- Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/ Toxic Substances Control Act (TSCA) Tracking System (FTTS) sites
- TSCA sites
- Section 7 Tracking System (SSTS) sites
- Biennial Reporting System (BRS) sites

The Property was not found on any of the federal databases searched. Two RCRA SQG were identified within a quarter mile of the Property. One of the sites, Leeward YMCA, is located cross gradient to the west of the Property. The other site, Kawaika's Painting and Waterproofing, is located upgradient to the north of the Property. Both sites did not have any reported violations and are not anticipated to adversely affect the Property. The Pearl Harbor Naval Station was identified to the south of the Property in the DOD database. A summary of the database search is provided in Table 6-1. A copy of the EDR report is provided in Appendix A.
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Notes: "-" means this distance is not within search criteria for the specific database.
"TP" = target property
6.2 **Hawaii Department of Health Records**

Hawaii DOH database and records reviewed include:

- State Hazardous Waste Sites (SHWS), the state’s equivalent to CERCLIS
- State permitted solid waste landfills, incinerators, or transfer stations (SWLF)
- State institutional control/engineering control registries (INST CONTROLS)
- State Voluntary Response Program (VCP) sites
- State Brownfields (BROWNFIELDS) sites
- State Leaking Underground Storage Tank (LUST) sites
- State Underground Storage Tank (UST) sites
- Release Notification Report sites (SPILLS) compiled by the Hazard Evaluation and Emergency Response Office (HEER)
- Environmental Management Division, which includes the following Branches:
  - Clean Air
  - Clean Water
  - Safe Drinking Water
  - Wastewater
  - Solid and Hazardous Waste (including Underground Storage Tank Section)

The Property was not listed on any of the databases searched by EDR (EDR, 2005). In response to a written inquiry, DOH HEER indicated that there are no reports of potential hazardous material release or other violations on the Property. A copy of the DOH HEER response is included in Appendix C.

One SHWS site was identified in the State of Hawaii DOH databases within the designated search radii:

- The mechanical equipment shop at the former Waipahu Sugar Mill is listed on the SHWS, LUST, SPILLS, and VCP databases. The databases report that soil staining and odor were observed after tank removal from a diesel fuel bunker. Motor oil was found in the sump soil located in the concrete vault. The vault was destroyed and additional oil was found
and contained in a plastic berm. A diesel plume in the groundwater was also reported. The site is currently undergoing further investigation and remedial action under the Voluntary Response Program. The Waipahu Sugar Mill is located approximately ¼-mile west southwest of the Property. The direction of groundwater flow puts the Property cross gradient from the Waipahu Sugar Mill site and contaminated groundwater from the site is unlikely to have impact on the Property.

Seven (7) Leaking Underground Storage Tank (LUST) sites were identified in the State of Hawaii DOH databases within the designated search radii. Four (4) sites are located at a lower elevation and are at a distance that is not anticipated to influence the Property. The following three LUST sites are located at an equal or higher elevation relative to the Property:

- As previously mentioned, the Waipahu Mechanic Shop at the former Waipahu Sugar Mill had a LUST. The mill yard at the Waipahu Sugar Mill also had a reported LUST.
- Nabarrete Store, located approximately ¼-mile north northwest of the Property, reportedly had a LUST in its property. Site cleanup has been completed.
- J's Waipahu Chevron located ¼-mile west southwest of the Property had a LUST. Site cleanup for petroleum has been initiated. The site is located cross-gradient to the Property.

Three UST sites were listed on DOH databases within the designated search radii. USTs at two of these sites are permanently out of use, while one site contains USTs that are currently in use.

A detailed description of each site can be found in the EDR report in Appendix A.

6.3 Real Property Tax Assessment Division
The CCH RPAD maintains real property ownership records for the Property. Information regarding property ownership is presented in Section 4.4.

6.4 Honolulu Fire Department
A written request was made to the Honolulu Fire Department (HFD) for fire and hazardous material spill incident reports. No incident reports were reported for the Property. Seven (7) incidents were reported within a ¼-mile radius of the Property.

6.5 Local Emergency Planning Committee
A written request was made to the Local Emergency Planning Committee (LEPC) for Tier 2 reports. Tier 2 reports contain information on facilities that store, use, or generate hazardous
materials/substances on their premises. The LEPC reported that they did not have any Tier 2 reports for the Property. The LEPC did report that an AT&T Wireless site located adjacent to the Property at 94-743 Kau'olu Place did have a Tier 2 report filed. The site was reported to have sulfuric acid.
Section 7  Findings, Conclusions and Recommendations

The findings and conclusions presented below are based on the site reconnaissance and review of reasonably available public records conducted for this study.

7.1 Findings

A review of historical records revealed the following:

- The historical records from the early 1900's to present indicate that the Property was never developed. The vicinity of the Property was used for utilized in the early 1900's for subsistence agriculture with crops such as rice and watercress. Aerial photographs and interviews with persons knowledgeable with the Property indicate that portions of the Property were later used for small agricultural plots by the local area residents during the mid 1970s to the late 1990s. The agricultural plots were irrigated with water pumped from the Wailani Stream located adjacent to the south of the Property. It is unknown as to whether any pesticides or herbicides were utilized by the area residents.

- According to interviews with knowledgeable persons, the Property contained three natural springs. All three springs were capped and drained by a subdrain system when the State of Hawaii initiated a ground surcharge program on the Property in the mid 1970s due to ground settlement and existing compressible soils. The ground surcharge program consisted of placing up to eight (8) feet of soil fill on top of the Property. The source location of the fill material is unknown. Presently, one of the capped springs at the northern end of the Property is leaking.

- The adjacent properties consist of residential homes to the north and east along Nalii and Paiwa Streets; Waipahu Neighborhood Park and Wailani Stream to the south; and elderly housing apartment complexes to the west.

- The Property is not listed in any of the Federal and State databases researched.

- Two RCRA small quantity generators (SQG) were identified within a ¼-mile of the Property. One of the sites, Leeward YMCA, is located cross gradient to the west of the Property. The other site, Kawaika's Painting and Waterproofing, is located upgradient to the north of the Property. Both sites did not have any reported violations and are not anticipated to adversely affect the Property.

7-1
• The mechanical equipment shop at the former Waipahu Sugar Mill is listed on the SHWS, LUST, SPILLS, and VCP databases. The databases report that soil staining and odor were observed after tank removal from a diesel fuel bunker. A diesel plume in the groundwater was also reported. The site is currently undergoing further investigation and remedial action under the Voluntary Response Program. The Waipahu Sugar Mill is located approximately 1/4-mile west southwest of the Property. The direction of groundwater flow puts the Property cross gradient from the Waipahu Sugar Mill site and contaminated groundwater from the site is unlikely to have impact on the Property.

• Six (6) Leaking Underground Storage Tank (LUST) sites were identified in the State of Hawaii DOH databases in addition to the mechanic shop at the Waipahu Sugar Mill. Four (4) sites are located at a lower elevation and are at a distance that is not anticipated to influence the Property. One site is located cross-gradient to the Property at a distance that is not anticipated to influence the Property. Site cleanup has been completed at the one site located upgradient from the Property.

An inspection of the site revealed the following:

• Several debris piles were observed along the northern boundary of the Property. The debris piles contained an assortment of debris including: engine blocks, miscellaneous car parts, rubber tires, empty 55-gallon drums, scrap metal, concrete rubble, and plastic containers. One full 1-gallon plastic container of antifreeze coolant was observed in one of the debris piles. Three car batteries were also observed on the Property. A number of the debris piles were partially buried. Complete details of the debris piles are presented in Section 5.1.

• Ponding water from the leaking spring extended approximately 200 feet in an east to west direction from behind the third home to the sixth home along Nalii Street. The width of the ponding water was approximately 10 feet. The ponding area is being used to cultivate vegetables such as taro and eggplant by the local residents along Nalii Street.

• PVC piping both exposed and partially buried were observed throughout the southern and western halves of the Property. The PVC piping appeared to have been used for irrigation of small agricultural plots. Historic evidence of small agricultural plots was observed in the western half of the Property. Wooden boards used to separate plots were observed in
the ground surface. Three former intake pipes approximately 3-inches in diameter were also observed hanging over the concrete channel into Wailani Stream.

- A sewer easement runs along the southern boundary of the Property adjacent to the Wailani Stream channel as evidenced by two sewer manholes along the channel.

7.2 Conclusions and Recommendations

We have performed a Phase I ESA of the property identified as O‘ahu TMK 9-4-017, parcel 58, the Property, in conformance with the scope and limitations of ASTM Practice E 1527-05. This assessment has revealed evidence of recognized environmental conditions in connection with the Property. Based on these conditions, EE concludes and recommends the following:

- The three car batteries and antifreeze coolant (1-gallon) observed on the Property should be properly disposed and/or recycled.

- The surface debris observed on the Property should be excavated, segregated and properly disposed and/or recycled. The majority of the debris was partially buried or overgrown with brush. Therefore, EE personnel were unable to determine if any spills or soil staining existed beneath the debris piles. The nature of the debris (i.e. engine blocks and other car parts) lends to the possibility of potential spills of gasoline, diesel and oil. The debris removal should be monitored by an environmental specialist. The soil beneath the debris piles should be inspected after debris removal and proper sampling and cleanup actions should be initiated if evidence of spills is observed.

- Beginning in the 1970s, the ground surface of the Property has been raised by filling with soil. The possibility exists that debris may have been illicitly buried. If buried debris is encountered during construction, the debris should be removed, segregated and properly disposed and/or recycled. The soil beneath the debris should also be inspected for evidence of spills.

- If the PVC irrigation piping observed throughout the Property requires removal during development, the piping should be properly disposed and/or recycled.

- The Property has been used for agricultural purposes by the local area residents. It is unknown whether any of the residents had applied pesticides or herbicides to any of the agricultural plots, and residual levels of pesticides and herbicides may exist on the
Property. Based on the nature of the plots and the proposed future use of the Property, further investigation for pesticides and herbicides is not warranted at this time.
Section 8  Limitations

We have performed our services for this project in accordance with our Agreement, and with ASTM Practice E 1527-05 for ESA investigations; no guarantees are either expressed or implied. The record search was limited to information that is reasonably ascertainable from public sources; this information is changing continually and is frequently incomplete. Unless we have actual knowledge to the contrary, information obtained from interviews or provided to us has been assumed to be correct and complete. We do not assume any liability for information that has been misrepresented to us or for items not visible, accessible, or present on the Property at the time of the site visit.

There is no investigation that is thorough enough to preclude the presence of materials on the Property, which presently, or in the future, may be considered hazardous. Because regulatory evaluation criteria are constantly changing, concentrations of contaminants present and considered to be acceptable may, in the future, become subject to different regulatory standards and require remediation.

Opinions and judgments expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal opinions. Unless site conditions change, this document and the information contained herein are valid for a period of 180 days according to the ASTM Practice, and have been prepared solely for the use of Gerald Park Urban Planner. No third party shall have the right to rely on Element Environmental, LLC’s opinions rendered in connection with the services or in this document without Element Environmental, LLC’s written consent and the third party’s agreement to be bound to the same conditions and limitations as the client.
Section 9  References

City & County of Honolulu, Real Property Assessment Division. Tax Map and property ownership history.


Environmental Planning Solutions, LLC, October 2001. *Phase I Environmental Site Assessment for Tax Map Key Parcel 9-4-17:051, Waipahu, Oahu, Hawaii.*

Foote, Donald E., et al., 1972. *United States, Department of Agriculture, Soil Conservation Service, Soil Survey of the Islands of Kaua'i, O'ahu, Maui, Moloka'i, and Lana'i, State of Hawai'i.*


Rehabilitation Hospital of the Pacific, August 1996. *Phase I Environmental Site Assessment for the Rehabilitation Hospital of the Pacific Independent Living Apartment Complex, Tax Map Key 9-4-17 Lot A, Portion of 55 and 1.*


APPENDIX B

TRAFFIC ASSESSMENT REPORT
PLANTATION TOWN APARTMENTS
TRAFFIC ASSESSMENT REPORT

FOR THE PROPOSED

PLANTATION TOWN APARTMENTS

Prepared for:
Gerald Park Urban Planner
1221 Kapiolani Boulevard, Suite 211
Honolulu, Hawaii 96814

Prepared by:
Wilson Okamoto Corporation
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826
WOC Ref. # 7513-01

February 2006
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Traffic Assessment Report for Plantation Town Apartments

I. INTRODUCTION

A. Purpose of Study

The purpose of this study is to identify and assess the traffic impacts resulting from the proposed Plantation Town Apartments development in Waipahu on the Island of Oahu. The project includes two twelve-story buildings containing a total of 330 multi-family residential units. The proposed project will be located in Waipahu between Kauolu Place and Paiwa Street. Access to the project site is via two driveways at Kauolu Place and Paiwa Street.

B. Scope of Study

This report presents the findings and conclusions of the traffic study, the scope of which includes:

1. Description of the proposed project.
2. Evaluation of existing roadway and traffic operations in the vicinity.
3. Analysis of future roadway and traffic conditions without the proposed project.
4. Analysis and development of trip generation characteristics for the proposed project.
5. Superimposing site-generated traffic over future traffic conditions.
6. The identification and analysis of traffic impacts resulting from the proposed project.
7. Recommendation of improvements, if appropriate, that would mitigate the traffic impacts resulting from the proposed project.

II. PROJECT DESCRIPTION

A. Location

The project site will be located in Waipahu on the island of Oahu and is bordered by Waipahu Recreation Center to the east, the Waipahu Civic Center and Waipahu Library to the south, Mokuola Street to the west, and residential uses to the north. The project site is further identified as a portion of the Tax Map Key 9-4-017: portion 58 (see Figure 1). Access to the proposed project will be via two access driveways off Kauolu Place and Paiwa Street.
B. Project Characteristics

The proposed Plantation Town Apartments project will be located on a portion of the State's Kauola Mixed-Use Development located north of the existing Kamalu and Hoolulu Elderly Housing Projects on a 7.411-acre lot, of which 6.0 acres will be used for the proposed project. The project is expected to be completed and occupied by the Year 2008 and includes two twelve-story buildings accommodating a total of 330 multi-family residential units and a recreational facility. Vehicular access to the proposed Plantation Town Apartments development will be provided via access driveways off Paiwa Street and Kauolu Place. The proposed project site plan is shown in Figure 2.

III. EXISTING TRAFFIC CONDITIONS

A. General

The proposed project site is located between Mokuola Street and Paiwa Street. Mokuola Street is predominately a two-way, two-lane City and County of Honolulu roadway generally oriented in the north-south direction and services one lane of traffic in each direction. The roadway is an extension of Managers Drive between Farrington Highway and the Interstate H-1 Freeway overpass, and continues towards Waieke as Lumaiina Street.

B. Area Roadway System

In the vicinity of the project site, Mokuola Street intersects with Kauolu Place. At this unsignalized T-intersection, Kauolu Place is a two-way, two-lane State of Hawaii roadway. One lane is provided in each direction and serves through and turning movements. The Kauolu Place approach to the intersection is stop-controlled.

Approximately 500 feet north of the Kauolu Place, Mokuola Street intersects with Kahuailani Street, a predominately two-way, two-lane City and County of Honolulu roadway generally oriented in the east-west direction. Kahuailani Street has one lane in each direction and serves as an access road for residents and other users between surrounding residential and commercial uses. At the unsignalized intersection of Kahuailani Street and Mokuola Street, all approaches include one lane in each direction that serves through and turning traffic movements.
Approximately 200 feet north of the intersection with Kahuailani Street, Mokuola Street intersects with Waipahu Street, a predominately two-way, two-lane City and County of Honolulu roadway generally oriented in the east-west direction. This roadway functions as a collector road that runs parallel and between the H-1 Interstate Freeway and Farrington Highway (Route 90). At this signalized intersection, Mokuola Street and Waipahu Street has one lane in each direction and all approaches have one exclusive left-turn lane and one shared through lane and right-turn lane. This signalized intersection operates with four phases with protected left-turn phases on all approaches. Cycle lengths are approximately 90 seconds and 140 seconds during the AM and PM peak hours of traffic, respectively.

Approximately 400 feet south of the T-intersection with Kauolu Place, Mokuola Street intersects with Hikimoe Street, a predominately two-way, two-lane private roadway generally oriented in the east-west direction and serves as a connector road between Mokuola Street and Waipahu Depot Street, accommodating the Waipahu Transit Center. At this signalized T-intersection, all approaches include one lane in each direction that serves through and turning traffic movements. This signalized intersection operates with two traffic signal phases, with 90-second and 100-second cycle lengths during the AM and PM peak hours of traffic, respectively.

The second proposed access driveway to the project site is located on Paiwa Street, a predominately two-way, two-lane City and County of Honolulu roadway oriented in the north-south direction that serves as a collector road between the H-1 Interstate Freeway and Farrington Highway (Route 90). Just north of the proposed project driveway, Paiwa Street intersects with Hilihiua Street, a predominately two-way, two-lane City and County of Honolulu roadway generally oriented in the east-west direction that serves as a local road between the adjacent residential uses and Paiwa Street. At this unsignalized T-intersection, Paiwa Street and Hilihiua Street has one lane in each direction that serves through and turning traffic movements with a stop control traffic operation on the Hilihiua Street intersection approach.

Approximately 300 feet north of the T-intersection with Hilihiua Street, Paiwa Street intersects with Nalii Street, a predominately two-way, two-lane City and
County of Honolulu roadway oriented in the east-west direction and serves as a connector road linking Mokuola Street and Paiwa Street. At this unsignalized intersection, all approaches have one lane in each direction that serve through and turning traffic movements.

C. Traffic Volumes and Conditions
   1. General
      a. Field Investigation
         A field investigation was conducted on January 10 and 18, 2006 and consisted of manual turning movement count surveys during the morning peak period between 6:30 AM and 8:30 AM, and the afternoon peak period between 3:30 PM and 5:30 PM at the following intersections:
         • Mokuola Street/Hikimoe Street
         • Mokuola Street/Kauolu Street
         • Mokuola Street/Kahualani Street
         • Mokuola Street/Waipahu Street
         • Paiwa Street/Hilihua Street
         • Paiwa Street/Nalii Street
         In addition, 24-hour mechanical traffic count surveys were collected along the Mokuola Street within the project vicinity to verify the peak traffic periods on the roadway. Appendix A includes the existing traffic count data.
b. Capacity Analysis Methodology

The highway capacity analysis performed in this study is based upon procedures presented in the "Highway Capacity Manual", Transportation Research Board, 2000, and the "Highway Capacity Software", developed by the Federal Highway Administration. The analysis is based on the concept of Level of Service (LOS) to identify the traffic impacts associated with traffic demands during the peak periods of traffic.

LOS is a quantitative and qualitative assessment of traffic operations. Levels of Service are defined by LOS "A" through "F"; LOS "A" representing ideal or free-flow traffic operating conditions and LOS "F" unacceptable or potentially congested traffic operating conditions. LOS "A" describes the operation with very low or no motorist delays, less than or equal to 10 seconds; LOS "B" describes the operation with short traffic delays between 10 and 15 seconds; LOS "C" describes the operation with an average motorist delays between 15 and 25 seconds; LOS "D" describes traffic operations with motorist delays between 25 and 35 seconds; LOS "E" describes traffic operations with long motorist delays between 35 and 50 seconds; and LOS "F" describes traffic operations with severe congestion with stop-and-go conditions with delays greater than 50 seconds. Table 1 generally illustrates the various traffic operating conditions for each designated Levels of Service.
Table 1: Levels of Service for Traffic Operating Conditions

“Volume-to-Capacity” (v/c) ratio is another measure indicating the relative traffic demand to the road carrying capacity. A v/c ratio of one (1.00) indicates that the roadway is operating at or near capacity. A v/c ratio of greater than 1.00 indicates that the traffic demand exceeds the road’s carrying capacity. The LOS definitions are included in Appendix B.
Traffic Assessment Report for Plantation Town Apartments

2. Existing Peak period Traffic

a. General

Figures 3 and 4 illustrate the existing AM and PM peak period traffic volumes and operating conditions. In the vicinity of the proposed project, the absolute commuter peak period time periods for each intersection are shown in Table 2.

<table>
<thead>
<tr>
<th>Intersection</th>
<th>AM Peak</th>
<th>PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mokuola Street/Hikimoe Street</td>
<td>7:15 AM to 8:15 AM</td>
<td>3:45 PM to 4:45 PM</td>
</tr>
<tr>
<td>Mokuola Street/Kauolu Place</td>
<td>7:00 AM to 8:00 AM</td>
<td>4:15 PM to 5:15 PM</td>
</tr>
<tr>
<td>Mokuola Street/Kahualani Street</td>
<td>7:00 AM to 8:00 AM</td>
<td>3:45 PM to 4:45 PM</td>
</tr>
<tr>
<td>Mokuola Street/Waipahu Street</td>
<td>7:00 AM to 8:00 AM</td>
<td>3:45 PM to 4:45 PM</td>
</tr>
<tr>
<td>Paiwa Street/Hilihua Street</td>
<td>7:00 AM to 8:00 AM</td>
<td>4:30 PM to 5:30 PM</td>
</tr>
<tr>
<td>Paiwa Street/Nalii Street</td>
<td>7:00 AM to 8:00 AM</td>
<td>4:30 PM to 5:30 PM</td>
</tr>
</tbody>
</table>

The analysis is based on these peak period time periods to identify the traffic impacts resulting from the proposed project. The LOS calculations are included in Appendix C.
b. Mokuola Street/Hikimoe Street

At the signalized intersection of Mokuola Street and Hikimoe Street, Hikimoe Street carries 140 vehicles and 212 vehicles eastbound during the AM and PM peak periods, respectively. This approach operates at LOS “B” during both peak periods.

At this intersection, Mokuola Street carries 315 vehicles northbound and 384 vehicles southbound during the AM peak period, and 358 vehicles northbound and 353 vehicles southbound during the PM peak period. The critical approaches at this intersection are the northbound and eastbound approaches which operates at LOS “B” during both peak periods of traffic.

Vehicular queues occasionally formed on the eastbound and southbound approaches during the AM peak period of traffic due to the offset driveway for the commercial uses, located south of Hikimoe Street and east of Mokuola Street. The morning commuter traffic was observed using this driveway to bypass the traffic signal light at the intersection of Mokuola Street and Farrington Highway south of the Mokuola Street and Hikimoe Street intersection. Queue lengths on the eastbound approach of approximately 3 to 5 vehicles and on the southbound approach of approximately 5 to 8 vehicles were observed at the intersection. However, most of these queues would clear the intersection after each traffic signal cycle change.

c. Mokuola Street/Kauolu Place

At the unsignalized T-intersection of Mokuola Street and Kauolu Place, Kauolu Place carries 14 vehicles and 37 vehicles westbound during the AM and PM peak periods, respectively. This approach operates at LOS “B” and LOS “C” during the AM and PM peak periods, respectively.

At this intersection, Mokuola Street carries 248 vehicles northbound and 451 vehicles southbound during the AM peak period,
and 463 vehicles northbound and 309 vehicles southbound during the PM peak period. The critical approach along Mokuola Street at this intersection is the southbound approach which operate at LOS “A” during both peak periods of traffic.

Vehicular queues occasionally formed on the southbound approach during the AM peak period of traffic due to the spill back traffic from the Waipahu Library driveways and the Mokuola Street and Hikimoe Street intersection. Queue lengths on the southbound approach of approximately 2 to 3 vehicles were observed at the intersection.

d. Mokuola Street/Kahualani Street

At the unsignalized intersection of Mokuola Street and Kahualani Street, Kahualani Street carries 38 vehicles eastbound and 71 vehicles westbound during the AM peak periods, and 38 vehicles eastbound and 78 vehicles westbound during the PM peak period. At this intersection, the critical approaches along Kahualani Street are the eastbound and westbound approaches which operates at LOS “C” during both peak periods of traffic.

At this intersection, Mokuola Street carries 250 vehicles northbound and 487 vehicles southbound during the AM peak period, and 394 vehicles northbound and 357 vehicles southbound during the PM peak period. At this intersection, the northbound and southbound approaches along Mokuola Street operates at LOS “A” during both peak periods of traffic.

Vehicular queues occasionally formed on the southbound approach during the AM peak period of traffic due to the spill back traffic from the Waipahu Library driveways and Hikimoe Street. Queue lengths on the southbound approach of approximately 2 to 3 vehicles were observed at the intersection.
e. Mokuola Street/Waipahu Street

At the northern signalized intersection of Mokuola Street and Waipahu Street, Waipahu Street carries 483 vehicles eastbound and 383 vehicles westbound during the AM peak period, and 491 vehicles eastbound and 471 vehicles westbound during the PM peak period. At this intersection, the eastbound and westbound left-turn movements operate at LOS “B” and LOS “C” during the AM and PM peak periods, respectively.

At this intersection, Mokuola Street carries 265 vehicles northbound and 446 vehicles southbound during the AM peak period, and 407 vehicles northbound and 454 vehicles southbound during the PM peak period. The critical movements at this intersection are the northbound left-turn movement which operates at LOS “B” and LOS “C” during the AM and PM peak periods, respectively, and the southbound shared through-lane and right-turn lane movements which operates at LOS “C” during both peak periods of traffic.

Vehicular queues occasionally formed on all approaches during both peak periods of traffic with the most significant queuing occurring on the northbound and southbound through movement of the intersection with 8 to 16 vehicles queued in the northbound approach while 14 to 16 vehicles queued in the southbound approach during both AM and PM peak periods, respectively. Most of these queues would clear the intersection after each traffic signal cycle change, but occasionally required more than one traffic signal cycle to clear.

f. Paiwa Street/Hilihua Street

At the unsignalized T-intersection of Paiwa Street and Hilihua Street, Hilihua Street carries 25 vehicles and 17 vehicles westbound during the AM and PM peak periods, respectively. This approach operates at LOS “B” during both peak periods of traffic.
At this intersection, Paiwa Street carries 314 vehicles northbound and 524 vehicles southbound during the AM peak period, and 260 vehicles northbound and 268 vehicles southbound during the PM peak period. The critical approach at this intersection is the southbound approach which operates at LOS “A” during both peak periods of traffic. Vehicular queues occasionally formed on the southbound approach during the AM peak period of traffic with 4 to 6 vehicles queued at the intersection overflowing onto Nalii Street due to left-turn movements at Hilihua Street.

g. Paiwa Street/Nalii Street

At the unsignalized intersection of Paiwa Street and Nalii Street, Nalii Street carries 59 vehicles eastbound and 27 vehicles westbound during the AM peak periods, and 63 vehicles eastbound and 14 vehicles westbound during the PM peak period. At this intersection, the critical approaches along Nalii Street are the eastbound approach which operates at LOS “B” during both peak periods, and the westbound approach which operates at LOS “C” and LOS “B” during the AM and PM peak periods, respectively.

At this intersection, Paiwa Street carries 322 vehicles northbound and 474 vehicles southbound during the AM peak period, and 250 vehicles northbound and 224 vehicles southbound during the PM peak period. Along Paiwa street, the southbound and northbound approaches operate at LOS “A” during both peak periods of traffic. Vehicular queues occasionally formed on the eastbound and southbound approaches with approximately 4 to 6 vehicles during the AM peak period of traffic.
IV. PROJECTED TRAFFIC CONDITIONS

A. Site-Generated Traffic

1. Trip Generation Methodology

The trip generation methodology used in this study is based upon generally accepted techniques developed by the Institute of Transportation Engineers (ITE) and published in “Trip Generation, 7th Edition,” 2003. The ITE trip generation rates are developed empirically by correlating the vehicle trip generation data with various land use characteristics such as the number of vehicle trips generated per dwelling unit. Table 3 summarizes the project site trip generation characteristics applied to the AM and PM peak periods of traffic.

<table>
<thead>
<tr>
<th>HIGH-RISE APARTMENTS INDEPENDENT VARIABLE</th>
<th>PROJECTED TRIP ENDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM PEAK</td>
<td></td>
</tr>
<tr>
<td>ENTER</td>
<td>25</td>
</tr>
<tr>
<td>EXIT</td>
<td>74</td>
</tr>
<tr>
<td>TOTAL</td>
<td>99</td>
</tr>
<tr>
<td>PM PEAK</td>
<td></td>
</tr>
<tr>
<td>ENTER</td>
<td>71</td>
</tr>
<tr>
<td>EXIT</td>
<td>45</td>
</tr>
<tr>
<td>TOTAL</td>
<td>116</td>
</tr>
</tbody>
</table>

2. Trip Distribution

Figures 5 and 6 show the distribution of site-generated vehicles trips at the six study intersections during the AM and PM peak hours of traffic. Access to the project site will be provided via driveways off of Kauolu Place and Paiwa Street. Based upon the existing traffic volumes along Mokuola Street and Paiwa Street, the two roadways contain approximately the same amount of vehicles traveling through the project vicinity during both peak periods of traffic. Therefore, it was assumed that 50% of the projected vehicle trips will use the proposed Kauolu driveway and 50% will use the proposed Paiwa driveway.
Traffic Assessment Report for Plantation Town Apartments

The directional distribution of traffic at the Kauolu Place driveway was based on the prevalent distribution of traffic along Mokuola Street. As such, 36.2% of vehicles were assumed to be traveling northbound and 63.8% of vehicles traveling southbound during the AM peak period while 57.9% of vehicles were assumed to be traveling northbound and 42.1% of vehicles traveling southbound during the PM peak period. The directional distribution of traffic at the Paiwa Street driveway was based on the prevalent distribution of traffic along Paiwa Street. As such, 38.1% of vehicles were traveling northbound and 61.9% of vehicles traveling southbound during the AM peak period while 48.5% of vehicles were assumed to be traveling northbound and 51.5% of vehicles traveling southbound during the PM peak period.

B. Through Traffic Forecasting Methodology

An analysis of the State Department of Transportation (SDOT) historical traffic data was made to determine an appropriate ambient growth of traffic demands in the project vicinity. Using linear regression analyses, historical data indicates a decrease in the annual traffic growth rate in the vicinity of the project. Therefore, for conservative analysis purposes, the travel forecast used in this study is based upon a conservative annual traffic growth rate of 2% per year. Using Year 2006 as the base year, a growth factor of 1.04 was applied to the existing traffic demands on the major roadways to achieve the projected ambient traffic demands for Year 2008.

C. Other Considerations

A proposed residential apartment development which will include approximately 70 apartment units may be located within the project vicinity. The project is expected to be completed by the Year 2008 with access along the east side of Mokuola Street between Nalii Street and Kauolu Place. Although specific project information for the apartment project is not available at this writing, vehicular trips to and from the project were incorporated in the Year 2008 traffic projections. Should this project not be completed and occupied by Year 2008, the traffic analysis contained herein represents a conservative analysis for the Plantation Town Apartments project.
D. **Total Traffic Volumes Without Project**

The projected Year 2008 AM and PM peak period traffic volumes and operating conditions without the proposed Plantation Town Apartments development are shown in Figures 7 and 8, and summarized in Table 4. The existing level of service designations are provided for comparison purposes. The LOS calculations are included in Appendix D.

**Table 4: Existing and Projected (Without Project) LOS Traffic Operating Conditions**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Critical Movements/Approaches</th>
<th>AM</th>
<th>Year 2008 w/out Proj</th>
<th>PM</th>
<th>Year 2008 w/out Proj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mokuola St/ Hikimo St</td>
<td>Northbound (LT-TH)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Eastbound (LT-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Mokuola St / Kauolu Pl</td>
<td>Southbound (L-TH)</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Westbound (LT-RT)</td>
<td>B</td>
<td>B</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Mokuola St / Kahualani St</td>
<td>Eastbound (LT-TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Westbound (LT-TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Mokuola St / Waipahu St</td>
<td>Northbound (LT-TH)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Southbound (TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Paiwa St/ Hilihua St</td>
<td>Westbound (LT-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Southbound (L-TH)</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Paiwa St / Nalii St</td>
<td>Eastbound (LT-TH-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Westbound (LT-TH-RT)</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>
YEAR 2008 AM PEAK HOURS OF TRAFFIC WITHOUT PROJECT

PLANTATION TOWN APARTMENTS

WILSON OKAMOTO CORPORATION ENGINEERS + PLANNERS

FIGURE 7
Traffic Assessment Report for Plantation Town Apartments

Traffic operations under Year 2008 without project conditions are expected to remain similar to existing conditions with the critical approaches for the six study intersections along Mokuola Street and Paiwa Street also expected to remain similar to existing conditions.

E.  Total Traffic Volumes With Project

The projected Year 2008 AM and PM peak period traffic volumes and operating conditions with the development of the proposed Plantation Town Apartments are shown in Figures 9 and 10. The cumulative volumes consist of site-generated traffic superimposed over Year 2008 projected traffic demands. The traffic impacts resulting from the proposed project are addressed in the following section.

V.  TRAFFIC IMPACT ANALYSIS

The Year 2008 cumulative AM and PM peak hour traffic conditions with the development of the Plantation Town Apartments development are summarized in Table 5. The existing and projected Year 2008 (Without Project) operating conditions are provided for comparison purposes. The LOS calculations are included in Appendix E.

Table 5: Existing and Projected Year 2008 (With and Without Project) Traffic Operating Conditions

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Critical Movements/Approaches</th>
<th>AM</th>
<th></th>
<th>PM</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Year 2008</td>
<td></td>
<td>Year 2008</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>w/out Proj</td>
<td></td>
<td>w/out Proj</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Year 2008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>w/Proj</td>
<td></td>
<td>w/Proj</td>
<td></td>
</tr>
<tr>
<td>Mokuola St/ Hikimoe St</td>
<td>Northbound (LT-TH)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Eastbound (LT-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Mokuola St/ Kauolu Pl</td>
<td>Southbound (LT-TH)</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Westbound (LT-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Mokuola St/ Kahuaialani St</td>
<td>Eastbound (LT-TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Westbound (LT-TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>
PLANTATION TOWN APARTMENTS

YEAR 2008 PM PEAK HOURS OF TRAFFIC WITH PROJECT

WILSON OKAMOTO CORPORATION

FIGURE 10

LENGEND

TRAFFIC MOVEMENT VOLUME (VPH)
LANE USAGE
LANE GROUP LEVEL OF SERVICE

NOT TO SCALE
Table 5 (Cont'd): Existing and Projected Year 2008 (With and Without Project) Traffic Operating Conditions

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Critical Movements/Approaches</th>
<th>AM</th>
<th></th>
<th>PM</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Year 2008 w/out Proj</td>
<td>Year 2008 w/ Proj</td>
<td>Year 2008 w/out Proj</td>
<td>Year 2008 w/ Proj</td>
</tr>
<tr>
<td>Mokuola St/ Waipahu St</td>
<td>Northbound (LT-TH)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Southbound (TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Paiwa Street / Project Driveway</td>
<td>Eastbound (LT-RT)</td>
<td>---</td>
<td>---</td>
<td>C</td>
<td>---</td>
</tr>
<tr>
<td>Paiwa St/ Hilihua St</td>
<td>Westbound (LT-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Southbound (LT-TH)</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Paiwa St / Nalii St</td>
<td>Eastbound (LT-TH-RT)</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Westbound (LT-TH-RT)</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
</tr>
</tbody>
</table>

Traffic operations in the vicinity of the proposed Plantation Town Apartments project are expected to remain similar to existing and Year 2008 without project conditions during both peak hours of traffic, with the exception of traffic operation at the Mokuola Street and Hikimoe Street intersection. The level of service for the northbound approach of this intersection is expected to deteriorate from LOS “B” to LOS “C” conditions during the projected PM peak period. The intersection of Paiwa Street and the project driveway would operate at acceptable levels of service of LOS “C” and LOS “B” during the projected AM and PM peak periods, respectively. The critical movements/approaches at the remaining study intersections are expected to operate at levels of service similar to Year 2008 without project conditions during both peak hours of traffic.
VI. RECOMMENDATIONS

Based on the analysis of the traffic data, the following are the recommendations of this study to be incorporated in the project design.

3. Maintain sufficient sight distance for motorists to safely enter and exit the project driveways.

4. Provide adequate on-site loading and off-loading service areas and prohibit off-site loading operations.

3. Provide adequate turn-around area for service, delivery, and refuse collection vehicles to maneuver on the project site to avoid vehicle-reversing maneuvers onto public roadways.

4. Provide sufficient driveway width to accommodate safe vehicle ingress and egress.

5. Provide sufficient turning radii at the project driveway to avoid or minimize vehicle encroachments to oncoming traffic lanes.

6. Align project driveway with existing roadways, as practical, to minimize conflicting vehicular movements at the intersections.

7. Ensure adequate pedestrian facilities are provided between the project and the Waipahu Transit Center.

VII. CONCLUSION

The proposed Plantation Town Apartments development entails the construction of two twelve-story buildings with a total of 330 multi-family residential units over a 6-acre lot in central Waipahu and is not expected to have a significant impact on traffic operations in the vicinity of the project site. The critical movements at the study intersection along Mokuula Street and Paiwa Street are expected to operate at levels of service similar to existing and Year 2008 without project conditions. In addition, the total traffic volumes entering the study intersections along Mokuula Street and Paiwa Street are anticipated to increase by 1-2% during both AM and PM peak periods. These increases in the total traffic volumes along this roadway are in the range of daily volume fluctuations and represent a minimal increase in the overall traffic demands.
APPENDIX C

WAIPAHU NEIGHBORHOOD BOARD MEETING MINUTES (DRAFT)
March 23, 2006
REGULAR MEETING MINUTES
THURSDAY, MARCH 23, 2006
WAIPAHU CULTURAL GARDEN PARK

CALL TO ORDER: Chair George Yakovenko called the meeting to order at 7:02 p.m. A quorum was present.

MEMBERS PRESENT: Marty Burke, Constante Domingo, Lorraine Duaysyonsod, Irene Elson, Reggie Garcia, Thomas Maus, Keny Nishimoto, Richard Oshiro, Craig Richter, Russell Roller, Rito Sanitalat, Robert Tokicka III, George Yakovenko, Connie Herolaga (appointed at this meeting).

MEMBERS ABSENT: None.

GUESTS: Baybee Hufana-Abian (Mayor’s Representative), Councilmember Nestor Garcia, Frank Lopez (Governor’s Representative), R. Scott Belford (Senator Wil Espero’s office), T. Ishii (Senator Brian Kanno’s office), Larry Takahashi (Senator Clarence Nishihara’s office), Representative Rida Cabanilla, Tom Berg (Representative Cabanilla’s office), Brandon Lee (Representative Ryan Yamane’s office), Captain Robert Moss (HFD), Officer Ken Miyazaki, Lt. Guy DeMello and Lt. William Weisskopf (HFD), Jane and Rodney Nishihara (BWS), Mike Tokijo, Stuart Ujimori, Dodge Watson and Jon Yanane (DDC), Scott Ishikawa (DOT), Breene Harimoto (BOE), Stan Fujimoto (HCDCH), Manual Ayala (Leeward YMCA), Darlyn Bunda (Waipahu Community Association), Pat Lee (Honolulu High-Capacity Corridor Transit Project), Rod Ohira (Honolulu Advertiser), Don Robbins (West O’ahu Current), Jennie Freeman and Lance and Stephanie Widner (Royal Kaniau Community Association), Mike Kimura and Lloyd Sueda (Plantation Town Apartments), Tom Schnell (PBR Hawai‘i), Kyle Hirano (James W. Glover), Kirt Pruyn (Hawaiian Dredging), Joseph O’Donnell (Hawai‘i Ironworkers Union), Rona Lownthly and Erolinda S. (FCCH), Bob and Yovonne Farrell (video producers), Joey A., Roldolfo Alfonso, Noelle Costa, Evelyn Cruz, Abraham De Jesus, Loretta Domingo, Mr. and Mrs. Galicinao, Leonora Gantala, Chae Hill, Mary Ann Kobayashi, Elvie Marmud, John Millen, Don Molina, Jeffery Mooney, Gerardo P., Judy Parker, Maria Raquindin, Ben Sanchez, Jesus Santos, Orlando Soria, Ken T., Barbara Thelin, Kimo Tuyah, Masu and Yukie Uyeda, Steve J. Rodrigues (Neighborhood

4/21/2006
INTRODUCTION OF GUESTS AND BOARD MEMBERS – At the request of Chair Yakovenko, everyone introduced themselves at this time.

(Maus arrived at 7:05 p.m.)

CHAIR’S ANNOUNCEMENTS – Chair Yakovenko stated: 1) He asked guests’ to sign-in on the guests list before leaving the meeting. 2) Anyone wishing to speak, must first be recognized by the chair. Each speaker will be allowed three minutes. 3) He thanked Connie Herolaga for opening the meeting facility and setting it up. 4) Bob Farrell will be videotaping one free meeting for the Board. After viewing the meeting on Ololo, the Board will make a decision whether to use its Publicity Account funds to air on Ololo or continue publishing in Midweek.

FILLING OF VACANCIES FOR SUBDISTRICTS 6, 7, 8, 9, 10 & 11 – Chair Yakovenko asked if there were any candidates willing to fill the vacancies in Subdistricts 6, 7, 8, 9, 10, and 11. Connie Herolaga (a former Board member) introduced herself as a candidate for Subdistrict 6. Burke moved and Duhailedesec seconded to appoint Connie Herolaga to fill the vacancy in Subdistrict 6. The motion carried unanimously. Neighborhood Assistant Steve J. Rodrigues administered the Oath of Office to Herolaga at this time.

APPROVAL OF FEBRUARY 23, 2006 REGULAR MEETING MINUTES: Duhailedesec moved and Burke seconded that the Waipahu Neighborhood Board approve the minutes as submitted. The motion carried unanimously.

TREASURER’S REPORT – No report.

OFFICIAL REPORTS:

Honolulu Fire Department (HFD) – No representative was present at this time, but arrived later in the meeting to make a report.

Honolulu Police Department (HPD) – Lt. William Weisskopf reported the statistics for the month of February in the Waipahu area: 16 assaults; 75 auto thefts; 25 auto theft recoveries; 43 burglaries; 67 criminal property damages; 10 drug/narcotics, 192 motor vehicle collisions; 7 O.V.U.I.; 2 robberies; 62 thefts; 57 UEMVs; and 3,912 calls for service in Waipahu (45% of the calls were for service). Arrests: adults – 119, juveniles – 66.

Concerns and comments followed:

1) Burke inquired about juvenile arrests, Lt. Weisskopf stated arrests included fights at school and an auto theft today at Waipahu District Park. Lt. Guy DeMello added there were truancy and runaway arrests.

2) Chair Yakovenko extended an invitation to the new mayor to attend the Board meetings. Lt. Weisskopf said he would have her attend.

HPD Weed & Seed – No report or representative was available.

RESIDENTS’ CONCERNS:

Honolulu High-Capacity Transit Corridor Project – Pat Lee circulated information on the transit corridor project. For more information, contact 660-2209 or visit www.honolulutransit.org. He asked to give regular updates.

(Roller arrived at 7:20 p.m.)

COMMUNITY REPORTS:

4/21/2006
CASTLE & COOKE – No report or representative was available.

CENTRAL O‘AHU REGIONAL PARK/WAIPIO SOCCER FACILITY – Burke circulated his monthly community report and highlighted the following: 1) A golf cart, used for maintenance, was stolen from the park. A 17-year-old was caught and now faces prosecution. 2) The Aquatics facility is well used. Public lap swimming is a major and growing attraction, especially with the heated water. The natural gas-powered heating system is proving highly efficient. Weekday lap swimming is from 7 a.m.-10 a.m., 3 p.m.-5 p.m., and 6:30 p.m.-8 p.m.; and weekends from 7 a.m.-11 a.m. 3) The operating concessionaire for the tennis facility continues to await a decision by the City about relocating its office from the starter shack to the new Tennis-Aquatics clubhouse. 4) The Wai‘anae Vision Team-funded playground apparatus is being enjoyed by keiki. 5) BWS rehab project – the project has been delayed due to the weather. 6) Wai‘anae Soccer Facility – the City and the Navy continue to seek ways to allow more restrooms to be installed nearer the fields. 7) Newspaper article – there was no March (February highlights) article. Beginning in April, MidWeek will publish a community news section: the Board’s column, if publishing resumes, would appear there, rather than in the GO West ad supplement.

DEPARTMENT OF TRANSPORTATION (DOT) – Deferred until later in the meeting.

BOARD OF EDUCATION (BOE) – Breene Harimoto circulated copies of “BOE Highlights”. In addition, he stated: 1) He has been on BOE for the past two years, and during that time he has been making the rounds of the Neighborhood Boards in the Leeward district. He hasn’t been able to make the Wai‘anae Neighborhood Board meetings in the past because BOE held their meetings on the same night. On some occasions, he will be unable to attend the Neighborhood Board meetings because he covers the entire state. 2) The next BOE Community Meeting in this area will be held on April 5, Kapolei Middle School, 6:30 p.m. to 8:30 p.m.

Concerns and comments followed:

1) Herolaga thanked Harimoto and BOE for approving the request to name the Wai‘anae Public Library Young Adult Room after the late C.O. “Andy” Anderson. Harimoto said the Board was glad to do it.

2) Tokioka inquired about the new report card format. Harimoto stated the change was made to align it closer to state standards. They realize it’s been a difficult transition. There have been a lot of problems with consistency.

3) Burke, a member of Kanoeani School Community Based Management (SCBM) Council, said the word need to get out that concerns from a school needs be brought to the council. Also, he thinks the new report cards are a cop-out. It is too broad and badly defined.

The agenda was taken out of order. There were no objections.

OFFICIALS REPORTS, Continued:

HONOLULU FIRE DEPARTMENT (HFD) – Captain Robert Moss reported: 1) He apologized for being late. They had to respond to an emergency. 2) For the month of February, the Wai‘anae and Waikiki Fire Stations responded to 15 fires, 130 medical emergencies, 16 hazardous calls and 51 miscellaneous calls. 3) Safety Tip: “Brush fires cause great damage. Dispose of all fires properly. Make and maintain a 30-foot wide firebreak by clearing vegetation-surrounding structures. Formulate emergency plans. For more information, contact Denise Laitinen of Firewise at 281-3497.

The agenda resumed regular order.

JAMES W. GLOVER INC. – WAI‘ANAE STREET/PLANETION VILLAGE SEWER RECONSTRUCTION – Kyle Hirano stated the sewer reconstruction project includes 2,100 feet of sewer line placement, 12 new sewer manholes along the sewer line; and it begins behind Saiki Motors through Hawaiian Plantation Village (behind administration building) to Awamoi Street. Construction begins May 15, 2006 and is expected to take one year to complete. Day work hours off roadway – 7:30 a.m.-4 p.m., May 2006 – September 2006; Night work hours – 6 p.m.-9 a.m., August 2006 – December 2006; Work hours on roadway – 8:30 a.m.-3:30 p.m., November 2006 – April 2007. During night work, noise will be kept to a minimum. If anyone has any questions, he can be reached at 591-8977.

4/21/2006
Leeward YMCA – Manual Ayala circulated a newsletter with Leeward YMCA construction update. In addition, he stated they are still on schedule for a grand opening in the first quarter of 2007. The total cost of the project is $13.5 million. He hopes the community will embrace the project. More information will be provided as it gets closer to the grand opening. If anyone has any questions, he can be reached at 671-6495. He thanked everyone for their support.

OMPO Citizen Advisory Committee (CAC) – Mauc circulated his OMPO CAC report.

Richter said he expressed his disappointment at last week’s CAC meeting. OMPO has decided to delete the second access road for Leeward Community College. The community has fought long and hard for the road. A petition was signed by LCC students and the administration in support of the project. At one time, there was $10 million for the project. If there were ever an emergency, people wouldn’t be able to get out since there is only one egress/ingress. The Governor was at the school this week and got caught in the traffic. He asked the Board to write a letter to the Governor, OMPO and CAC and ask that the second access road be placed back on the agenda. Representative Moses, who sits on OMPO’s Policy Committee, indicated that if it’s not a regional project it will not receive federal funds. The City will now pursue the project.

Waipahu Community Association (WCA) – Darryn Bunda reported: 1) WCA should receive its building permit within three days for its Festival Market Place. Grand opening is scheduled for first quarter 2007. 2) For Earth Day, volunteers will be cleaning-up the stream along Waipahu Depot Road and Pohala Marsh. 3) Next week Tuesday’s Town Hall Meeting at August Ahrens School, 5:30 p.m. – 7:30 p.m., will focus on preventing underage drinking. Guest speakers will be the Lt. Governor and MADD. A light supper will be served.

Waipahu Community Foundation – Roller announced the deadline to submit an application for the next quarterly grant is Friday, June 2. He encouraged non-profit youth organizations in the Waipahu area to apply. Applications are available through him or at the Waipahu High School administration office. If anyone needs assistance in filing out the application or wants an electronic copy of the application, please contact him at 671-6636. Last quarter, they awarded $18,000 in grants.

PRESENTATIONS:

Farrington Highway Rehabilitation Project – Scott Ishikawa, State Department of Transportation (DOT), stated they will repave Farrington Highway, in the vicinity of Old Fort Weaver Road to Kamehameha Highway in Pearl City. The project is 3.37 miles long. Work (prep) will begin on April 3 and is scheduled to be completed in October or November, weather permitting. Hours of work will be from 8:30 a.m. – 3 p.m. There will be no night work because of the close proximity of apartment buildings. The first portion of the project, landscaping, has already been completed. Repaving will begin on the Ewa side of Farrington Highway. Area businesses have been notified since it will affect their driveways. Grace Pacific is the contractor, the same company who did Moanalua Freeway. Regarding the widening of the H-1 Freeway in Waimalu, they lost four weekends of work because of the weather. They will try again this weekend. Four lanes will need to be closed to pour concrete.

Concerns and comments followed:

1) A resident said there is a lack of street signs on Old Fort Weaver Road.

2) Burke commended DOT for the landscaping on Farrington Highway. It seems people are responding and not littering as much. He also commended former legislator Calvin Kawamoto and the late C.O. “Andy” Anderson for their efforts and hard work in making this project a reality.

3) Ishikawa said he agrees that a second access road is needed for LCC.

4) Richter thanked Ishikawa for being very supportive of the Waipahu community.

5) Chair Yakovenko asked Ishikawa if he would like to be on the monthly agenda. Ishikawa answered he would call before the next agenda is set.

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6) Ishikawa stated they are done with the Kunia section with only striping and final grading to be completed. It will take another three to four weeks for Fort Weaver Road to be completed, weather permitting.

Plantation Town Apartments – Affordable Housing Project on Kau’oulu Place – Lloyd Sueca, architect, said they plan to build two towers with 230 fee simple apartment units on a six-acre site on Kau’oulu Place. The floor plan includes one, two and three bedroom units. Affordable housing is for people who make 80% below the median income (i.e. family of four would be $97,000). The current price for a single-family house in Oahu is $614,000. The need for affordable housing has led to this project. The purpose of this project is to provide the maximum amount of affordable housing with the least amount of State resources. There will be no cost to the State. This project is far lower-income, but affordable housing. Parkings includes 385 master stalls, 33 visitors stalls and 10 ADA stalls. The building will be set back 50 feet from the closest neighbor. A gated fence will surround the property. There will also be a security parking area and a security entrance. Amenities include recreational facilities, picnic area, garden, children’s area, air-conditioned units, washer and dryer, etc. The color of the building will be neutral. Construction is scheduled to begin fall 2006. Wilson Okamoto Corporation has already completed a traffic study.

There was lengthy discussion on this issue. Concerns and comments included: 1) A resident supported the project. It will be a landmark for the community. 2) Kirt Pruyn of Hawaiian Dredging, said if the project is built, their company would build it. Hawaiian Dredging has been in Hawaii for more than 100 years. They have previously built two projects for Mike Kimura. He asked the Board to support the project. 3) Joseph O’Donnell of Hawai’i Iron Workers Union, said they are in strong support of the project. This project will give families an opportunity to fulfill their dreams of owning their own home. 4) A resident said he’s been renting for the past 10 years. He has been trying to buy a house, but can’t afford the high asking prices. He’s in support of the project because it gives him the opportunity to purchase a home. 5) Oshiro had concerns about the project. There was an already dense neighborhood. He asked if there is any other location with a lot more space (i.e. Kapolei). Kimura stated the land became available when Housing and Community Development Corporation of Hawai’i (HCDC) said they had six acres available, that’s when he became interested. 6) Burke inquired what plans are there to keep if affordable. Kimura answered the State would monitor. There will be a 10-year buyback and equity sharing. Burke had concerns about the soil conditions as the project is located in a flood plain. Kimura stated the State has been loading the soil for the past 25 years. He disagreed that it’s in a flood plain. 7) Kimura said the towers will be 105 feet high. Burke had concerns about the building blocking the sunlight for area residents. 8) In response to Sanitaian, Kimura stated the State will require them to do a lottery for the units. Sanitaian asked if it’s a for-profit project. Kimura answered yes. 9) Richter asked about a public report and association fees. Kimura answered they haven’t filed a public report yet. Association fees include $190 – one bedroom, $238 – two bedroom, and $276 – three bedroom. The fees are subject to increase, as determined by the board of directors. 10) Herolaga inquired about the traffic study. Kimura answered it did include the other proposed project for the area. Herolaga noted that Mokula Street gets congested when there is an accident. She asked if resident of Nali and Palwa Streets were notified. Kimura answered yes. 11) Domingo commended Kimura for giving first time buyers an opportunity to purchase their own home. The prices are affordable. 12) A resident of Nali Street said the traffic is really congested now and it will only get worse with this project. He had concerns that the project be built next to his backyard. 13) A resident stated he’s not looking forward to the project. There is already traffic and parking problems, and the project will be built next to his house. The 105-foot towers will block the sunlight. 14) A resident, who lives and work in the area, said the project is needed to keep the people in the community. He hears all the concerns, which should be addressed. Traffic is going to be a problem wherever you go. 15) Chair Yakovenko asked Kimura what he needs from the Board. Kimura said he just wanted to come before the Board and inform the community about the project.

Proposed Rezoning of P-2 Land in Royal Kunia – Lance Widner, Royal Kunia Community Association (RCKA), stated there are two proposals for the 172-acre Royal Kunia Golf Course property. One is for residential development and the other is for a cemetery. A survey was sent to area residents and 68% responded. Results indicated that 11% in favor of residential development; 4% in favor of cemetery; 0% in favor of both option; and 1% had no response. Senator Kanno introduced a resolution requesting the City to maintain the current zoning for the establishment of a park, golf course, or continued use of open space. Letters of support were provided.

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Concerns and comments followed:

1) Burke asked if RKCA has taken a position. Widner answered he was asked to first come to the Neighborhood Board. Burke noted that the Board will not take a position until RKCA takes a position.

2) Chair Yakovenko mentioned he and Oshiro attended January’s RKCA’s meeting and a lot of homeowners were opposed to rezoning. Oshiro echoed Chair Yakovenko’s comment.

3) Sanatan, who is a former member of RKCA, asked about impact fees ($20 million). Councilmember Garcia answered he’s not sure if impact fees still apply to this property. Also, RKCA can’t take an official position because the property is not in their area so it’s up to the elected officials. The owners have to go to the agency or the City Council. He will assist RKCA if they have a position. It’s a matter before the government (City) and the owner, not the association. Oshiro questioned if RKCA does not have jurisdiction, what other community association would have jurisdiction.

4) Burke disagreed with Councilmember Garcia. The Hawai’i Revised Statutes (HRS) gives RKCA bylaws, corporation charters, etc. Richter, who was a member of the Waieke Community Association, agreed with Burke. He said the answers can be found in the declaration. We can have comments, but the decision rests with the landowner.

5) Chair Yakovenko asked Widner to keep the Board updated.

UNFINISHED BUSINESS:

Board Consensus on how to expend Board’s FY06 Publicity Account Funds (Olelo versus Midweek) – Chair Yakovenko mentioned this issue has been on the Board’s agenda for the past five to six months. After viewing tonight’s meeting on Olelo, the Board will have a better idea whether to stay with Midweek or go with Olelo. This item will be on next month’s agenda.

Redistricting Waipahu Neighborhood Board Seats – Chair Yakovenko noted this issue was thoroughly discussed at last month’s meeting. Since then, he has met with Executive Secretary Joan Manke and Elwin Spray of the Neighborhood Commission Office. He described the steps needed in order to redistrict the Board seats. The change would not take effect until the 2009 elections. At this time, Chair Yakovenko asked for volunteers to sit on the Redistricting Committee. To comply with the Sunshine Law, an agenda must be filed six days prior to the meeting. After a brief discussion, Burke, Herolaga, Sanatan, Tokioka and Yakovenko will sit on the committee. Herolaga agreed to chair the committee. Chair Yakovenko suggested Waipahu District Park as a meeting site. Burke suggested Central O‘ahu Regional Park.

Status of Retaining Neighborhood Assistance Steve Rodrigues to the Waipahu Neighborhood Board – Roller asked the status of retaining Rodrigues as the Board’s Neighborhood Assistant. Chair Yakovenko answered according to Joan Manke the decision is final. He has spoken with Manke about three to four times on this issue. Roller mentioned he called Manke regarding this issue, but she never returned his call.

NEW BUSINESS:

Transfer Funds from Operating and Refreshment Accounts to Publicity Account – Chair Yakovenko said the Board needs to transfer funds from its Operating and Refreshment Accounts to its Publicity Account to cover costs for Midweek until the end of the fiscal year (June 30, 2005). Since the Board does not have a treasurer’s report to know how much needs to be transferred, this item will be deferred until next month’s meeting.

Burke had concerns that the Neighborhood Commission Office hasn’t provided a treasurer’s report since November. He said it’s not Maus’ (treasurer) fault that there is no treasurer’s report.

4/21/2006
GOVERNMENT REPORTS:

Mayor's Representative – Baybee Hufana-Abian reported: 1) Beginning this summer, a ferry system from Barbers Point to Aloha Tower will begin. 2) At the Mayor's State of the City Address, the Mayor reaffirmed the City will stay focused on its core priorities of public safety, road and park maintenance, sewer repairs, traffic and transportation, and solid waste. 3) The City will continue to wage a war on potholes. 4) Honolulu Zoo recently unveiled its Keiki Zoo. 4) She circulated information on curbside recycling, green waste pickup, and bulky item pickup. Items made from recycled materials were displayed (i.e. shoe lace, pencil, tote bag). 5) Follow-up items: a) police will meet with the registered owner of the vehicle involved in the car alarm concern (Chair Yakovenko’s concern); b) the request to have the Mayor support the Kipapa Gulch Bikeway project will be submitted to both the MD’s and the Mayor’s office; c) DPR staff is aware of the structural problems at Waipahu District Park. DDC is conducting investigation work. 6) The Neighborhood Assistant circulated “Honolulu News”, the Mayor’s monthly newsletter.

Concerns and comments followed:

1) Chair Yakovenko mentioned he received a call from a HPD sergeant indicating that officers couldn’t find the vehicle in question (regarding the car alarm). The owner of the vehicle now parks his vehicle in the apartment complex parking lot.

2) Burke said the request for the Mayor’s position on the Kipapa Bikeway project was made at last month’s meeting. The Board also passed a resolution, which is attached to the minutes/agenda. Hufana-Abian will follow-up.

3) Bob Farrell inquired where could the recycled products be purchased. Hufana-Abian will follow-up.

Board of Water Supply (BWS) – Jane and Rodney Nishihara circulated BWS’ monthly report and highlighted the following: 1) There were two main breaks in the month of February in Waipahu (the pipe is a six-inch cast iron main on Awamoku Place that broke twice. The main is 50 years old). Although BWS continues to proactively repair and replace water mains, many of the pipelines are nearing its useful life and must be replaced. BWS spends millions of dollars every year to improve the aging infrastructure. 2) Although Detect-a-leak Week was earlier this month, BWS wants to make sure you know how to find hidden water wasters year-round: a) check your house periodically for leaks; b) check your toilet.

Council Member Nestor Garcia – Councilmember Garcia circulated his monthly report and highlighted the following: 1) Included in his report is Capital Improvement Projects (CIP) for Waipahu. 2) He spoke with Parks Director Lester Chang regarding the structural problems at Waipahu District Park swimming pool. 3) He has some concerns regarding the two 12-story affordable housing project on Kau'ola Place. Dialogue was held with the developer where he informed him that the site was a former duck pond. Councilmember Garcia said he wrote a letter to HCDCH before the project was awarded. He wanted the building to have a lower height limit. The developer did not need Neighborhood Board approval; they were only required to make a presentation. City Council has to either vote up or down.

Burke agreed with Councilmember Garcia regarding the affordable housing project. The long-term implications have to be looked into. Insurance companies are shying away from flood plain areas. Hopefully, the City Council will ask the Neighborhood Board for an official position. The tough questions need to be asked. Councilmember Garcia said he has not said no to the project, but suggested that changes be made to the proposal.

Councilmember Gary Okino – No report or representative was available.

Congressman Ed Case – No report or representative was available.

Governor’s Representative – Frank Lopez circulated the “Governor’s Update” and highlighted the following: 1) The U.S. Surgeon General lent his support to the Lingle-Aiha Administration’s effort to reduce tobacco use in Hawai’i by assisting in the launch of a public education campaign about the

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dangers of second-hand smoke. 2) The Department of Public Safety will coordinate to use prisoners for maintenance.

Oshiro asked Lopez to find out what State lands, outside of Waipahu, are available for development. Lopez will follow-up.

Senator Will Espero – R. Scott Belford circulated Senator Espero’s monthly report and was available for questions.

Senator Brian Kanno – T. Ishii circulated Senator Kanno’s monthly report and was available for questions.

Senator Clarence Nishihara – Larry Takahashi circulated Senator Nishihara’s monthly report and was available for questions.

Representative Rida Cabanilla – Representative Cabanilla circulated her monthly report and reported that she introduced HB 2855 that will bring the latest technology directly to the traffic accident scene for the purpose of documenting and recording circumstances surrounding the accident. The equipment will open up the roads quicker without compromising the investigation process.

Burke was concerned that each time he sends Representative Cabanilla an email it gets returned because her mailbox is full. Representative Cabanilla will follow-up.

Representative Jon Karamatsu – Brandon Lee circulated Representative Karamatsu’s monthly report.

Representative Mark Moses – Representative Moses circulated his monthly report and highlighted the following: 1) EPA is accepting public comments until April regarding the proposed remedy for contaminants at the former site of Chem- Wood Treatment Company at Campbell Industrial Park. 2) Ground breaking was held on the new Pacific Aviation Museum at Pearl Harbor. 3) A public meeting was held where Army officials provided an analysis of the effects of ocean environments on the chemical munitions dumped off the Waianae coast and called for more analysis, testing and monitoring. 4) Kapolei State Building was awarded the prestigious Energy Star award from EPA for energy performance, etc. 5) DLNR is proposing to establish an artificial reef site on the seafloor offshore from Kalaheo. 6) Kapolei Property Development has filed a petition with the State Land Use Commission to urbanize 332 acres of land located between Kalaheo Barbers Point Harbor and the Kapolei Business Park. 7) Tina Kobuke, a Leeward resident, received the 2006 Hawai’i Spirit of Youth Award.

Representative Alex Sonson – Representative Sonson circulated his monthly report and highlighted the following: 1) Caregivers Day was a huge success. The Legislature paid special tribute to those who serve as caregivers by dedicating a day of entertainment, information and fun for them. 2) There is a move to have “no smoking” at every workplace if it is enclosed or partially enclosed. He is trying to strengthen the bill to include open-air areas. 3) The three strikes bill is not moving and stuck in Judiciary Committee. The focus is on very violent crimes. 4) A derelict vehicle bill, introduced by a representative from Kaua’i, is moving along. 5) Welfare reform is being discussed.

Representative Ryan Yamane – Brandon Lee circulated Representative Yamane’s monthly report and was available for questions.

ADJOURNMENT: By consensus, the meeting adjourned at 9:43 p.m.

Submitted by:

Steve J. Rodrigues
Neighborhood Assistant

4/21/2006
Thursday, April 20, 2006

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4/21/2006
APPENDIX D

ENVIRONMENTAL ASSESSMENT COMMENTS AND RESPONSES
March 9, 2006

Gerald Park Urban Planner
1221 Kapilina Boulevard
Honolulu, Hawaii 96814

Attention: Mr. Michael Kimura

Subject: Draft Environmental Assessment for Plantation Town Apartments

Dear Sir:

Thank you for consulting with us during the preparation of the Draft Environmental Assessment for the Plantation Town Apartments, a multi-family affordable residential housing project located off of Palawa Street in Waipahu. Hawaiian Telcom has existing aerial facilities on Palawa Street and existing underground facilities on Kauau Place. We do not foresee any conflicts with the proposed project.

Should you have any questions, please call Garrett Hayashi at 840-1438.

Sincerely,

[Signature]

Section Manager - OSP Engineering

cc: Planning (A-5)

File
March 8, 2006

Mr. Gerald Park
Gerald Park, Urban Planner
1221 Kapolei Boulevard, Suite 211
Haleiwa, Hawaii 96712

Dear Mr. Park:

Subject: Your Letter Dated February 27, 2006 Regarding Draft Environmental Assessment

Punahou Town Apartments, TMK: 9-4-017, parcel 18

Thank you for the opportunity to comment on the proposed project.

The existing water system is presently adequate to accommodate the proposed development. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit. The final decision on the availability of water will be confirmed when the building permit is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The project is subject to Board of Water Supply Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the building permit.

If you have any questions, please contact Robert Chun at 548-5443.

Very truly yours,

KEITH S. SHIDA
Principal Executive
Customer Care Division
March 20, 2006

Mr. Gerald Park
Gerald Park Urban Planner
1221 Kapahulu Ave., Suite 211
Honolulu, Hawaii 96814

Dear Mr. Park:

Subject: Draft Environmental Assessment
Plantation Town Apartments
TM# 9-4-017; portion 058

Thank you for the opportunity to review and comment on the Draft Environmental Assessment relating to the development of the Plantation Town Apartments.

The Department of Parks and Recreation is pleased with the developer’s proposed 30,775 square feet of onsite private park however, the draft EA does not identify the specific location of property to be dedicated for park purposes nor does it describe the proposed improvements.

Onsite private parks can significantly contribute to the recreational needs of multi-family developments like the one proposed however, the area dedicated for park use must be suitable for recreational activities and not just be landscaped areas otherwise required for the project.

We would like to discuss the details of the private park with you and invite you to contact my secretary Casstyn Ishara at 492-5585 to schedule a meeting with my staff.

Should you have any questions, please contact Mr. John Reid, Planner, at 492-2454.

Sincerely,

[Signature]

LESTER K.C. CHANG
Director

GERALD PARK
Urban Planner

Planning
Land Use
Research
Environmental Studies

1221 Kapahulu Ave.
Suite 211
Honolulu, Hawaii 96814

April 24, 2006

Lester K.C. Chang
Director
Department of Parks and Recreation
City and County of Honolulu
1000 Uoolo Street, Suite 309
Kapahulu, Hawaii 96770

Dear Mr. Chang:

Subject: Draft Environmental Assessment
Plantation Town Apartments, Waipahu
TM# 9-4-017; portion 058

Waipahu, Ewa District, Oahu

Thank you for reviewing and commenting on the Draft Environmental Assessment prepared for the subject project. The developer and part of his consultant team met with Mr. John Reid and Mr. Duster Liu on April 11, 2006 to brief them on the project.

During the meeting it was indicated that in addition to a park area of approximately 30,000 square feet, a recreation building of 3,000 square feet and a separate 5,000 square foot community garden are included as part of the recreational facilities. The location of these recreation improvements was highlighted on a site plan left with your staff.

Staff was also notified that Plantation Town Apartments LLC has applied for a 2010 exemption from the Park Dedication Requirement of the City and County of Honolulu.

The participation of the Department of Parks and Recreation in the environmental assessment review process is appreciated.

Sincerely,

GERALD PARK
Urban Planner

Gerald Park

cc: M. Kimura, PTA
T. Schnell, PBR
March 23, 2006

Dear Mr. Park:

Re: Plantation Town Apartments
Walipuna, Oahu
TMK: 3-4-017; portion 058

Thank you for the opportunity to comment on the draft EA of the Plantation Town Apartments project. We have reviewed the DSA and have the following comments:

On page 25, at Paragraph 5, Utility Services, the draft EA states that three utility poles that support overhead electrical lines will be relocated off-site during construction. Would you please provide more detail about the relocation, including its duration and any plans to restore the poles to their original locations.

Relocation of existing HECO infrastructure should be coordinated with us in the planning, design and construction phases. Please notify us at the earliest possible time by furnishing a written request to proceed. We will work with you so that construction may progress as safely as possible to minimize any delay or impact on the project schedule. All costs associated with any relocation or modification, either temporary or permanent, for the convenience of the contractor (e.g., temporary bridging, de-energizing of lines, etc.) or that enables the contractor to fulfill his contractual obligations, shall be borne by the contractor. Please note that the requestor may also incur costs and experience delays in association with relocation and/or redesign.

Please continue to keep us informed as the project develops. In the event that our facilities or existing easements within the project area become affected, please forward two sets of plans for our review as soon as possible so that we may evaluate potential impacts. In the meantime, HECO will need continued access to our facilities for maintenance purposes.

Our point of contact for this project is Michael Lum, Lead Engineer, Transmission & Distribution Division, Engineering Department. Please feel free to deal directly with Mr. Lum (543-7030) to coordinate HECO's continued input in this project.

Sincerely,

Kirk S. Tomita
Senior Environmental Scientist

cc: M. Lum

GERALD PARK
Urban Planner

9-4-017; portion 058

April 24, 2006

Mr. Gerald Park
Hawaiian Electric Company, Inc.
PO Box 2759
Honolulu, HI 96804-0001

Dear Mr. Park:

Thank you for reviewing and commenting on the Draft Environmental Assessment for the subject project. The following response is offered for your comment.

The Draft Environmental Assessment stated incorrectly that "three utility poles that support overhead utility lines will be relocated off-site during construction" (Page 25, Paragraph 5, Utility Services). The utility poles will remain in their present location and will not be relocated.

The developer or their representative will keep Hawaiian Electric apprised of activities that may affect your facilities. Access to your facilities for maintenance purposes will continue to be provided.

The participation of Hawaiian Electric in the environmental assessment review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

cc: M. Kinura, PTA

T. Sathwell, PIBR
Dear Ms. Aveiro and Mr. Park:

This responds to your request for comments related to a proposed affordable housing project in the vicinity of an unnamed spring at Waipahu, City and County of Honolulu. The proposed activity is located at TRK (1) 9-4-17; por. 5R. Based on the information provided in the draft Environmental Assessment, the parcel contains several capped springs and contains 254 years of unconsolidated, uncharged fill to stabilize saturated soils. At present an open body of water approximately 10 feet wide and 200 feet long exists along the northwest side of the development parcel. Excess groundwater from this body of water follows an engineered drainageway which directs surface and subsurface flows to the Wailua Stream Channel, which is a perennial tributary to Middle Loch and the Pearl Harbor estuary. This spring is therefore considered adjacent to a tributary water to the Pacific Ocean (e.g., Wainiha Stream) and its existing course and capacity shall be considered a water of the United States subject to the jurisdiction of Section 404 of the Clean Water Act. Any contemplated activities involving the discharge of dredged or fill material into these waters will likely require a Department of the Army permit. In the future, if you propose activities in, near or having the potential to affect this jurisdictional water (i.e., the unnamed spring), consultation should take place with Mr. Farley Watanabe of our Regulatory Branch at 438-7701 to determine if a DA permit may be required.

Please refer to case file number POH-2006-73 in any future correspondence with our office. This determination does not obviate the Housing and Community Development Corporation of Hawaii, or its agents, from complying with other federal, state, or county permit, certifications or requirements which may be required should you proceed with your project.

Sincerely,

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

Copy Furnished:

Mr. Wendy Wilton, U.S. Environmental Protection Agency, Region IX, Honolulu Branch, P.O. Box 50003, Honolulu, Hawaii 96850
Mr. Peter Young, Chairperson, Department of Land & Natural Resources, State of Hawaii, P.O. Box 621, Honolulu, Hawaii 96803
Mr. Denis R. Law, Chief, Clean Water Branch, Environmental Management Division, State Department of Health, P.O. Box 3378, Honolulu, HI 96801-3386
Mr. John Nakagawa, Office of Planning, Coastal Zone Management Program, P.O. Box 2339, Honolulu, HI 96824
April 24, 2006

George P. Young, P.E.
Chief, Regulatory Branch
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96856-5440

Dear Mr. Young:

Subject: Plantation Town Apartments
TMC S-4-017: lot 56
Waimalu, Ewa District, Oahu
File Number: PCH-2006-73

On April 5, 2006, Mr. Rudy Mina of MLE Pacific and I met with Ms. Laurene Silva and Mr. Farley Watanabe to discuss the subject case file. A site plan depicting the location and spatial extent of the open body of water, photographs of the water body, and a general description of existing conditions at the project site were presented.

The discussion focused on whether work on the project required a Department of the Army Permit. In correspondence dated March 27, 2006, your office indicated that a Department of the Army Permit may be required if discharge material or fill was placed in the open body of water on the property. Your response was in reply to correspondence from Ms. Stephanie Aveiro, Executive Director of the Housing and Community Development Corporation of Hawaii, requesting a jurisdictional determination and permit requirements for a standing body of water (February 2, 2006) and from my office requesting comments to a Draft Environmental Assessment for the Plantation Town Apartments project (February 27, 2006).

Your staff offered the following:

- A Department of the Army Permit is not required if there is no discharge or fill placed in the open body of water and Wallard Stream.
- The open body of water is adjacent to Wallard Stream. Historic episodes of surcharging fills have covered the normal surface connection from this open body of water to Wallard Stream.
- A Department of the Army permit is not required for discharge of dredged or fill material to project areas other than the open body of water and Wallard Stream.

A site plan showing the delineation of the open water body should be submitted by official HCDOH letter to the Regulatory Branch. Regulatory staff will certify the delineation of the open body of water on the site plan and it will serve as the jurisdictional boundary. The site delineation plan should show and include a table of individual survey point coordinates and subsection/coordinate points (NAD83). Formal notification will be by Corps return letter.

As a result of the discussion, Plantation Town Apartments LLC has decided to keep the open body of water as is and will incorporate it into the site plan for the project. This statement will be included with the official cover letter for delineation certification.

Sincerely,

GERALD PARK URBAN PLANNER
Gerald Park

c: M. Kimura, PTA
R. Mina, MSPH
T. Schuell, PBL
Mr. Gerald Park  
1223 Kapiolani Boulevard, Suite 211  
Honolulu, Hawaii 96814

Dear Mr. Park:

Re: Draft Environmental Assessment  
Plantation Town Apartments  
Paia Street Masts of Waipahu Field - Waipahu  
Tax Map Key 6-4: 5-19

This responds to your request, received February 27, 2006, to review and comment on the Draft Environmental Assessment (EA) for the Plantation Town Apartments project on the above site, which is state-owned and under the administrative control of the Housing and Community Development Corporation of Hawaii (HCDC). We understand that the project will be seeking various exemptions from planning, zoning and/or construction standards, pursuant to Chapter 204G, Hawaii Revised Statutes. We have the following comments.

Wastewater Branch: On November 9, 2005, a Site Development Master Application (No. 2005/SCA-680) for sewer connection of the project to the municipal wastewater system was approved. Please contact Ms. Tessa Ching at 523-4500 if you have any questions concerning Wastewater Branch comments.

Civil Engineering Branch: Prior to obtaining grading and/or construction plan approval, drainage and storm water quality reports must be submitted. Please contact Mr. Don Fujii at 523-4212 if you have any questions concerning Civil Engineering Branch comments.

Traffic Review Branch:
A. Consideration should be given to extending Kauai Place to intersect with Paia Street. The new roadway should be aligned with Hillside Place.

B. Adequate vehicular sight distance should be provided and maintained to pedestrians and other vehicles at all driveway connections to public access roads.

C. Construction plans for all work with or affecting City streets should be submitted for review and comment.

Please contact Mr. Mel Hirayama at 523-4519 if you have any questions concerning Traffic Review Branch comments.

Planning Division:

A. Summary Findings and Recommendations:

1. The development proposal for the Plantation Town Apartments is consistent with the relevant Oahu General Plan policies, and the project's location near the Waipahu Civic Center and Library is appropriate. The project generally complies with the Central Oahu Sustainable Communities Plan (COSP) and the Waipahu Livable Communities Initiative in terms of providing affordable housing. However, the currently proposed height and building volume are not consistent with several specific COSP policies/guidelines. It also appears inconsistent with several of the urban design principles of the Waipahu Livable Communities Initiative. These inconsistencies may be overcome via exemptions allowed as part of a Chapter 204G, HRS application.

2. Expand the views analysis to include views from surrounding affected properties at a ground level. The views analysis should also include views of the old sugar mill and from Waipahu Field, Waipahu Civic Center and Waipahu Public Library, and from Farrington Highway. No views analysis from the site is shown in the Draft EA. The photo simulations on page 41 of the Draft EA show the project from an elevated position and not from areas affected at ground level.

B. Compliance with the Oahu General Plan: Section IV, Objective A, Policies 7 and 8 of the Oahu General Plan address the need to provide financial and other incentives to encourage the private sector to build homes for low- and moderate-income residents through participation in joint public/private housing development. The proposed Plantation Town Apartments project is intended to provide 330 affordable apartments on State land through a public-private sector arrangement and is therefore in compliance with the relevant policies of the Oahu General Plan.

C. Compliance with the Central Oahu Sustainable Communities Plan: The Draft EA has been examined for its relevancy to the COSP in terms of the following topics:
1. Section 3.5.2.5 Residential Areas: The project proposes that "[o]nly a portion of the property in the southern corner has been set aside for resident use as a garden." This satisfies the COSCP suggestion that "small community gardens should be established in residential and apartment areas." This garden area is shown on the site plan, but is not indicated on the Landscape Concept Plan.

The project supports the COSCP policy that mid-rise, medium density apartment buildings, including mixed-use development, should be encouraged within one-quarter (1/4) miles of future town center/basin nodes.

2. Section 3.5 Waipahu Town – Community Facilities Anchor:
   a. Section 3.5.1.1 Policies – Government services center to be consolidated in the vicinity of Moana Street and Waipahu District Park. Planned facilities should include low-rise public rental units. The project conforms to principle to this policy and will add support to the “Community Facilities Anchor” function within Waipahu.
   b. Section 3.5.3.1 Urban Design – “Existing zoning heights and densities should be preserved throughout Waipahu Town to help maintain the small town scale.” The project is not in keeping with the “small town scale” due to its proposed height and bulk.

3. Section 3.8 Existing and Planned Residential Communities:
   a. Table 3.2 – Density and Height Guidelines by Residential Category states that “Medium Density Apartment building heights in the transit area centered on the Waipahu Depot Road and Farrington Highway Intersection should not exceed the lower of the elevation of the roof ridge line of Waipahu Sugar Mill or 50 feet.”
   b. Section 3.8.2.3 Medium Density Apartment – Density should accommodate 25 to 90 units per acre and building heights should not exceed 60 feet.

At 104 feet, the project significantly exceeds several COSCP policies prescribing a low-rise and “small towns scale” form of development. However, the project’s affordable housing contribution, and appropriate location in proximity to community facilities lends support to the proposed Chapter 2010, HRS exemptions.

D. Compliance with the Waipahu Livable Communities Initiative: Chapter III of the Waipahu Livable Communities Initiative sets out several relevant urban design principles. The project, as presently configured, does not comply with these design principles as noted below.

1. The scale and sense of Waipahu as a small town shall be preserved. The project does not fit with the scale of Waipahu as a small town.

2. The visual dominance of the sugar mill shall be maintained. The project’s height and bulk will visually compete with and overwhelm the sugar mill structures.

3. Buildings shall be limited to two (2) or three (3) stories high in keeping with the area’s historic scale and to preserve views of existing mill structures. At 12 stories, the two (2) structures will be out of proportion with the historic scale of the area.

4. Buildings should avoid awkward or oversized forms, and long building forms should be broken down or offset into smaller masses or more residential proportions. Splitting the development into two (2), 12-story structures, even though offset, does not effectively mitigate the oversized building form.

Please contact Mr. Harold Sester at 527-6028 if you have any questions concerning Planning Division comments.

Land Use Permits Division:

A. The Final EA should discuss in greater depth the anticipated impacts which the project will have on existing public schools and recreation facilities in the affected area.

B. For clarity and ease of use, Section 3.4C, Anticipated Long-term Impacts should be organized by subject matter in a manner similar to Section 3 of the Draft EA.

C. A conditional use permit (CUP) for joint development of multiple zoning lots and a subdivision approval should be added to the list of permits required for the project. The Department of Planning and Permitting (DPP) is the “authority” for both of these permits. [Note: The DPP is currently processing an application for a conditional use permit (No. 2008/CUP-14) for the joint development of four (4) zoning lots in advance of an anticipated subdivision application for the project site.]
April 24, 2006

Henry Eng, FAICP, Director
Department of Planning and Permitting
City and County of Honolulu
850 South King Street
Honolulu, Hawaii 96813

Dear Mr. Eng:

Subject: Plantation Town Apartments

TMID: 9-4-017; plat: 58
Waipahu, Ewa District, Oahu

We acknowledge that the Wastewater Branch has approved a Site Development Master Application for sewer connection for the project to the municipal wastewater system.

Traffic Review Branch.

A. Extending Ka'uno Place to intersect with Palwa Street was considered. It was decided, however, to provide separate residential driveways to Palwa Street and Ka'uno Place.

An extension would have created a "through" street for vehicles on Palwa Street and Ka'uno Place. Aligning the street below the location of the two buildings would have separated the buildings from parking areas requiring residents to cross a street to gain their vehicles or their residences.

A street aligned on the mauka side of the Plantation Town Apartments would be too close to the project buildings and the adjacent residential lots. Without adequate setbacks on both sides of the street, vehicle traffic and noise would adversely affect public health and safety and that of project residents and residents on Niihau Street.

A road at this location also would have taken up too much of the land area suitable for development.

B. Palwa Street is the only public access road for which the proposed project has a driveway connection. The main driveway for residents was sited to stay as far away from a new bus stop built near the Waialae Stream Channel and to provide...
reasonable sight distance in the direction of a sight curve on Palau Street below its intersection with Nani Street.

C. Construction plans for all work within or affecting City streets will be submitted for review and comment.

Planning Division

A. Summary Findings and Recommendations

1. Thank you for acknowledging that 1) Plantation Town Apartments is consistent with relevant Oahu General Plan policies; 2) the project's location near the Waipahu Civic Center and Library is appropriate; and 3) the project generally complies with the Central Oahu Sustainable Communities Plan and the Waipahu Livable Communities Initiative in terms of providing affordable housing.

Concerning your statement about building height and volume, Plantation Town Apartments LLC has submitted a 2015 HRS application requesting exemptions from:

Central Oahu Sustainable Communities Plan Section 3.5.1.1 Community Facilities Anchor area to exempt Plantation Town Apartments from the "low-rise public rental units" requirement.

Central Oahu Sustainable Communities Plan Section 3.5.3.1 to exempt Plantation Town Apartments from having to maintain a "small-town scale" regarding heights and densities.

Central Oahu Sustainable Communities Plan Section 3.6.2.3 and Table 3.2 to exempt Plantation Town Apartments from the medium density apartment development guideline of 60 feet.

Waipahu Livable Communities Initiative, Chapter 10.1 to exempt Plantation Town Apartments from urban design principles relating to the scale and sense of Waipahu as a small town, maintaining the visual dominance of the sugar mill, and limits on building heights and form.

2. An expanded view analysis has been completed from ground view perspectives you noted in your comments. The view analysis is attached to this letter and included in the Final Environmental Assessment.

The panoramic photographic simulations provide a visual comparison of the height and form of the Plantation Town Apartments with the Waipahu sugar mill smokestack, the existing Ho'okuus and Kualii Elderly Apartment buildings, and the HonFed Building on Waipahu Depot Road and Farrington Highway.

Elevated views were taken by helicopter since the project site generally was not visible from ground level at different public locations. For example, the site is not visible from the Waipahu Public Library (across the sidewalk at the entry to the library) because views are blocked by the library building, landscaping, and the elderly housing project. The project site is not visible from the front entry of the Waipahu Civic Center because the Civic Center building blocks all north facing views. A portion of the site can be glimpsed through the trees that border the parking area at the rear of the Civic Center. The project site and the proposed development may be viewed from north facing above ground offices in the Civic Center.

Existing views across the project site from near Palau Street and Kualii Place were provided in the Draft Environmental Assessment.

B. Compliance with the Oahu General Plan

The referenced General Plan objective and policies will be included in the Final Environmental Assessment.

C. Compliance with Central Oahu Sustainable Communities Plan (COSSP)

1. Section 3.5.3.5 Residential Areas

Thank you for acknowledging that the project satisfies the COSSP suggestion that "small community gardens should be established in residential and apartment areas."

A revised Landscape Concept Plan with the community garden area labeled will be included in the Final Environmental Assessment.

Thank you for acknowledging that the project support the policy that mid-rise, medium density apartment buildings, including mixed-use development, should be encouraged within one-quarter (1/4) mile of town center/transit nodes.

2. Section 3.5 Waipahu Town-Community Facilities Anchor

a. Section 3.5.1.1 Policies

Thank you for acknowledging that Plantation Town Apartments supports this policy in principle. The Draft Environmental Assessment disclosed that the project is not a low-rise rental unit project but a mid-rise owner-occupied affordable apartment project. The project will offer five simple residential units at prices affordable to individuals and families making between 80 to 120 percent of the HUD medium income.

b. Section 3.5.3.1 Urban Design

The project site borders existing single-family and multi-family residential uses. The Plantation Town Apartments property is an in-fill location on vacant State owned land master planned for housing. The height and bulk of the Plantation Town Apartments is the result of meeting the Housing and Community Development Corporation of Hawai'i (HCDC) goal for the property, which is to provide the maximum number of affordable housing units using the minimum amount of State resources.
3. Section 3.6. Existing and Planned Residential Communities

a. Table 3.2 Density and Height Guidelines

Plantation Town Apartments complies with the CODCP overall density guideline of 25-50 units per acre by providing 55 units per acre. However, in providing this density and attempting to achieve the HCDC development goal for the property, the height of both buildings will be 105 feet.

b. Section 3.2.2 Medium Density Apartment

See response above.

D. Compliance with the Ewa Maui Communities Initiative

It is acknowledged that the Plantation Town Apartments may not be consistent with several urban design principles identified in the Ewa Maui Communities Initiative and noted in this comment. The statements below expand on the rationale behind the 201G, HRS exemptions being sought from the CODCP and the Ewa Maui Communities Initiative.

Small Town Scale

The Central Oahu Sustainable Communities Plan and the Ewa Maui Communities Initiative seek to preserve the sense and scale of Ewa Maui as a small town. Ewa Maui, however, is not as small a town as many make it out to be.

Consider that the town is located between the Waipio Golf Course and the Central Oahu Regional Park with its state of the art facilities, baseball, and softball fields. The Waipio Shopping Mall, a major shopping center that attracts residents and visitors, is located above the town. Toward the western edge of town, the Kapolei Town Center is located along the main road of Kapolei Highway and a major Everard Park medical facility is located along the adjacent street. Urban expansion is pushing toward the town.

Thus on one hand there is a desire to preserve the sense and scale of a small town but external forces that transformed and continues to change the small town environment should be recognized. The old commercial district and the sugar mill are symbols of a past-1900's and pre-1950's Ewa Maui, the strip malls along Farrington Highway are symbols of a past-1900's and pre-1950's Ewa Maui.

Rather than contributing to small town urban sprawl, Plantation Town Apartments will infill a large vacant lot in an older section of the community. It is consistent with City development policies to promote urban density development along major transportation and transit routes (to help promote existing and future public transportation and transit routes (to help reduce the dependence on the automobile), revitalize the old downtown Ewa Maui commercial area, sustain existing commercial activities on nearby Farrington Highway, and provide clean, safe, affordable housing for Ewa Maui's people.

Visual Dominance of the Sugar Mill/View Preservation

The visual prominence of the sugar mill smokestack will be retained. The visual analysis presented in the Draft Environmental Assessment shows that the smokestack will continue to be the visual landmark for Ewa Maui. From certain locales, the Plantation Town Apartments may be seen with the smokestack but should not overwhelm its prominence. From the District Park, the smokestack will still be visible above the hilltop.

The existing sugar mill structures at the base of the smokestack cannot be seen from the project site to the project site to have no visual impact on the sugar mill structures. The project will not affect views of existing mill buildings as seen from Waipio Street, Waipio Depot Road, Hana L'Orange Field, and areas above the hilltop.

It should be noted that both buildings are similar in dimension (length and width) to the nearby He'eia and Kamalii Elderly Housing buildings.

Overscaled Building Form

At a density of 55 units per acre, the proposed Plantation Town Apartments is within the density range of 25 to 50 units per acre for medium-density apartments. The height of the two residential buildings would exceed the maximum height limit for the residential zoning district and the prescribed 60-foot height guideline for Ewa Maui.

The proposed building height of 105 feet was disclosed in the Draft Environmental Assessment. It was also disclosed that an exemption to the height requirement would be requested.

Land Use Permits Division

A. Expand discussion of impacts to public schools and recreation facilities

In the Final Environmental Assessment, discussion of impacts on public schools and recreation facilities will be expanded based on comments received from the Department of Education and a meeting with Department of Parks and Recreation administrators.

B. Clarity of Layout

The discussion of environmental impacts was written for easy reading in disclosing anticipated environmental impacts.

C. List of Permits

A Conditional Use Permit Minor for Joint Development and Subdivision Approval will be added to the List of Permits.
D. We acknowledge that the Department of Planning and Permitting has determined that the project is eligible for exemptions pursuant to Chapter 201G, HRS. An application for obtaining the exemptions was submitted to DPP on April 7, 2006.

E. Concerns raised at the Walapahi Neighborhood Board presentation on March 23, 2003 will be addressed in the Final Environmental Assessment. A summary of the Walapahi Neighborhood Board meeting of March 23, 2006 will be included in the Final Environmental Assessment.

F. A Finding of No Significant Impact determination is anticipated.

The participation of the Department of Planning and Permitting in the environmental assessment review process has helped to compile a comprehensive document.

Sincerely,

GERALD PARK
URBAN PLANNER

Gerald Park


c: M. Kimura, PTA
T. Schnell, PRR
March 22, 2006

Mr. Gerald Park
Gerald Park Urban Planner
1221 Kapiolani Boulevard, Suite 211
Honolulu, Hawaii 96814

Dear Mr. Park:

Subject: Draft Environmental Assessment
Plaintown Town Apartments
Tax Map Key: 9-4-017: Portion 058
Waipahu, Oahu, Hawaii

In response to your letter dated February 27, 2006, regarding the above-mentioned project, the Honolulu Fire Department (HFD) reviewed the materials you provided and requires that the following be complied with for all new construction:

1. Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45.720 m) from a fire apparatus access road as measured by an approved route around the exterior of the building or facility. (1997 Uniform Fire Code, Section 903.2.1.)

2. Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into or within the county.

On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of 150 feet (45.720 m) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. (1997 Uniform Fire Code, Section 903.3 as amended.)

Mr. Gerald Park
Page 2
March 22, 2006

3. Submit civil drawings to the HFD for review and approval.

Please forward all future correspondence to the HFD at the following address:

Honolulu Fire Department
635 South Street
Honolulu, Hawaii 96813-5007

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention Bureau at 723-7151.

Sincerely,

KENNETH G. SILVA
Fire Chief

KGS/SH
cc: Mr. Michael Kimura, Plaintown Town Apartments, LLC
April 24, 2006

Kenneth G. Silva, Fire Chief
Fire Department
City and County of Honolulu
335 South Street
Honolulu, Hawaii 96813-5007

Dear Chief Silva:

Subject: Plantation Town Apartments
TMRC: 9-4-017; lot: 08
Waipahu, Ewa District, Oahu

Thank you for reviewing and commenting on the Draft Environmental Assessment for the subject project. The following responses are offered in the order your comments were presented.

1. Fire Apparatus Road

   The project driveways and internal circulation system will accommodate a fire apparatus and provide ready access to both of the two multi-residential buildings and the recreation building.

2. Fire Flow

   The Board of Water Supply has stated that the existing water system is presently adequate to accommodate Plantation Town Apartments. On-site fire hydrants and mains capable of supplying the required fire flow will be provided.

3. Civil drawings will be submitted to the Honolulu Fire Department for review and approval.

The participation of the Honolulu Fire Department in the environmental assessment review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

Cc: M. Kimura, PTA
    T. Schnell, PBR
Office of the Superintendent
March 30, 2006

Mr. Gerald Park
Gerald Park Urban Planner
1221 Kapiolani Boulevard, Suite 211
Honolulu, Hawaii 96814

Dear Mr. Park:

Subject: Draft Environmental Assessment for Plantation Town Apartments,
Waipahu, Oahu; TMK 9-4-017, par. 58

The Department of Education (DOE) has reviewed the Draft Environmental Assessment (DEA) for Plantation Town Apartments, a 330-unit apartment project in Waipahu.

The DOE estimates that approximately 90 students will eventually live in the project. The DOE believes that is a significant number of students who will impact the enrollment of the schools serving the area. We will ask the City and County of Honolulu to impose a school fair share contribution condition when granting the project an exemption from zoning under the provisions of Chapter 100, HRS.

The most likely schools to be impacted by the project will be Augus Akers Elementary, Waipahu Intermediate, and Waipahu High School. Augus Akers presently has a capacity of 1,179 students and its current enrollment is 1,275. While in the school may have the capacity for additional students, the DOE has concerns about the overall size of the elementary school. Waipahu Intermediate has a capacity of 1,294 students and its current enrollment is 1,129 as it has already exceeded its facility capacity. Waipahu High School is the DOE's greatest concern. It has a capacity of 2,071 students and its enrollment has surpassed that figure for several years. In our most recent projections for the school year 2010-2011, we anticipate enrollment exceeding the facility capacity by 636 students.

The school fair share contribution will be used to offset enrollment growth impacts by adding portable classrooms or expanding existing facilities.

Thank you for the opportunity to review and comment on this EA. Should you have any questions, please call Heidi Meeker at the Facilities Development Branch at 733-4862.

Very truly yours,

Patricia Hamamoto

Patricia Hamamoto, Superintendent
Department of Education
State of Hawaii
PO Box 2300
Honolulu, Hawaii 96804

Dear Ms. Hamamoto:

Subject: Plantation Town Apartments
TMK 9-4-017, par. 58
Waipahu, Ewa District, Oahu

Thank you for reviewing and commenting on the Draft Environmental Assessment for the subject project. The information provided by the Department of Education concerning school capacity, projection of school age children to be generated by the project, and the affected schools in the Waipahu High Complex will be included in the Final Environmental Assessment.

Plantation Tower Apartments LLC has submitted a 201G application for the project to the City Department of Planning and Permitting. One of the requested 201G exemptions is from the school fair share contribution normally sought by the Department of Education for new residential developments.

As Plantation Town Apartments is a 100 percent affordable housing project on State-owned land, we respectfully request that you waive your request for a school fair share contribution.

The participation of the Department of Education in the environmental review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

M. Kimura, PTA
T. Schnell, PBR

Ralph Moore, Acting Assistant Superintendent, OIS
Duane Kachuli, Public Works Manager, OIS
Karen Morizane, CAS, Nimitz/Waipahu Complex Areas

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER
March 28, 2008

Mr. Gerald Park
Gerald Park Urban Planner
1221 Kapiolani Boulevard, Suite 211
Hilo, Hawaii 96720

Dear Mr. Park:

Subject: Draft Environmental Assessment (DEA) Plantation Town Apartments, Waihee

TMK: 9-4-017: portion 058

Thank you for the opportunity to provide comments on the DEA, dated February 2006, for the subject proposed multi-family residential housing project.

As noted in the DEA, we concur that the storm water runoff generated by the proposed project should comply with the City policy to direct storm water to open spaces for percolation into the ground and provide for an on-site detention system with controlled release to the City drainage system. The DEA should also indicate that the quantity of storm water discharge into the City system should be less than or equal to that runoff generated by the existing vacant undeveloped land within the project limits.

Should you have any questions, please call Charles Pignataro of the Division of Road Maintenance, at 484-7697.

Very truly yours,

[Signature]

for Laveme Higa, P.E.
Director and Chief Engineer

LHsm

April 24, 2006

GERALD PARK
Urban Planner

Laveme Higa, P.E., Director
Department of Facilities Maintenance
City and County of Honolulu
1000 Ualaha Street, Suite 211
Kapolei, Hawaii 96707

Dear Ms. Higa:

Subject: Plantation Town Apartments, Waihee

TMK: 9-4-017: portion 058

Waihee, Ewa District, Oahu

06-286

Thank you for reviewing and commenting on the Draft Environmental Assessment prepared for the subject project.

Your comment that "the quantity of storm water discharged into the City system should be less than or equal to that runoff generated by the existing vacant land within the project limits" will be included in the Final Environmental Assessment.

The participation of the Department of Facilities Maintenance in the environmental assessment review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

[Signature]

Gerald Park

c: M. Kimura, PTA
T. Schnell, PBR
March 31, 2006

Ms. Stephanie Aveiro, Executive Director
Housing and Community Development Corporation of Hawai‘i
677 Queen Street, Suite 300
Honolulu, Hawai‘i 96813

Dear Ms. Aveiro:

Subject: Draft Environment Assessment for the Plantation Town Apartments

Thank you for the opportunity to review the subject document. We have the following comment:

1. Please consult with the Department of Education regarding future school enrollment in the area.

2. Please notify affected neighbors about the potential noise and vibration impacts of the pile driving.

Should you have any questions, please call Joye thingsam at 586-4185.

Sincerely,

Genevieve Salmonson
Director

cc: Gerald Park

April 24, 2006

Genevieve Salmonson, Director
Office of Environmental Quality Control
State of Hawai‘i
235 South Beretania Street, Suite 702
Honolulu, Hawai‘i 96813-2437

Dear Ms. Salmonson:

Subject: Plantation Town Apartments

Thank you for reviewing and commenting on the Draft Environmental Assessment for the subject project. The following responses are offered in the order that your comments were presented.

1) In their review of the Draft Environmental Assessment, the Department of Education commented that an "estimated 99 students will eventually reside in the project."

2) Applicant will notify residents living near the project site of impending pile driving. As presented in the Draft Environmental Assessment, construction work would be scheduled for normal working hours (7:00 AM to 3:30 PM). Pile driving is projected to take an estimated 3-3 months. Pile driving will not commence at 7:00 AM but at a later time. Applicant is also exploring alternatives to using a pneumatic pile driver in an effort to reduce the noise generated by this piece of construction equipment.

The participation of the Office of Environmental Quality Control in the environmental review process is appreciated.

Sincerely,

GERALD PARK URBAN PLANNER

cc: M. Kimura, PTA
    T. Schmutz, FBI
Ms. Stephanie Aveiro
Executive Director
Housing and Community Development
Corporation of Hawaii
Department of Human Services
677 Queen Street, Suite 300
Honolulu, Hawaii 96813

April 3, 2006

Mr. Gerald Park
Urban Planner
1221 Kapiliwana Boulevard, Suite 211
Honolulu, Hawaii 96814

Dear Ms. Aveiro and Mr. Park:

Subject: Proposed Affordable Housing

This letter is made to a letter, dated March 27, 2006, from Mr. George P. Young, Chief of the Regulatory Branch, Honolulu Engineer District (HED) of the U.S. Army Corps of Engineers (COE), in reply to the proposed affordable housing project in the vicinity of an unsummarized spring in Wai’alae, City and County of Honolulu. The proposed activity is located at TMRC: (1) 9-4-077824 (portion), Island of Oahu.

Mr. Young indicated in his letter of March 27, 2006, that "[B]ased on the information provided in the draft Environmental Assessment, the parcel contains several capped springs and contains 25+ years of unconsolidated, uncharged fill to stabilize saturated soils. At present an open body of water approximately 10 feet wide and 200 feet long exists along the northeast side of the development parcel. Excess groundwater from this body of water flows an engineered drainaway which directs surface, and subsurface flows to the Wailua Stream Channel, which is a perennial tributary to Middle Loch and the Pearl Harbor estuary. This spring is therefore a tributary to the Pacific Ocean (e.g., Wai’alae Stream) and its existing course and capacity shall be considered a water of the United States subject to the

Jurisdiction of Section 404 of the Clean Water Act. Any contemplated activities involving the discharge of dredged or fill material into these waters will likely require a Department of the Army permit. In the future, if you propose activities in, near, or having the potential to affect this jurisdictional water (e.g., the unsummarized spring), consultation should take place with Mr. Fiske Watanabe of our Regulatory Branch at 433-7701 to determine if a DA permit may be required."

The Department of Health (Department), Clean Water Branch (CWB) is given the responsibility of water pollution control in the State of Hawaii under the sub-authorization of CWA; Hawaii Revised Statutes (HRS), Chapter 342D; and Hawaii Administrative Rules (HAR), Chapters 11-54 (Title Water Quality Standards) and 11-55 (Title Water Pollution Control). The following are our comments and recommendations based on the limited information contained in Mr. Young’s letter of March 27, 2006:

1. Pursuant to Federal Water Pollution Control Act (commonly known as the “Clean Water Act” (CWA), Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for “any applicant for Federal license or permit to construct any activity including, but not limited to, construction or operation of facilities, which may result in any discharge into the navigable waters...” (emphasis added). The term “discharge” is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40, Code of Federal Regulations (CFR), Section 122.2; and HAR, Chapter 11-54.

You shall contact the CWB at (808) 586-4309 for the detailed Section 401 WQC application and processing requirements if Mr. Young determines that a Department of the Army (DA) permit is required for the subject project. Section 401 WQC application form may also be picked up at our office or downloaded from our website at:

http://www.hawaii.gov/health/permitting/water/cleanwater/forms/wqc-index.html

2. In accordance with HAR, Section 11-55-04 and Subsection 11-55-34.05, the Director of Health may require the submission of an individual permit application or a Notice of Intent (NOI) for general permit coverage authorized under the National Pollutant Discharge Elimination System (NPDES).

A. An application for an NPDES individual permit is to be submitted at least 180 days before the commencement of the respective activities. The NPDES application forms may also be picked up at our office or downloaded from our website at:

h. An NOI to be covered by an NPDES general permit is to be submitted at least 30 days before the commencement of the respective activity. A separate NOI is needed for coverage under each of the applicable NPDES general permit as listed below. The NOI forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/envt/environmental/permit/hrf_perm/perm-guide/index.html.

i. Storm water associated with industrial activities, as defined in Title 69, CFR, Sections 122.26(b)(14)(i) through 122.26(b)(14)(iv) and 122.26(b)(14)(vi).
   [HAR, Chapter 11-55, Appendix E]

ii. Construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the commencement of the construction activities. [HAR, Chapter 11-55, Appendix C]

Your attention is specifically directed to this requirement. Public record data contained in the Hawaii Information Service website indicated that TMC: (1) 9-4-01/7/108 has a total land area of 7.61 acres.

iii. Discharges of treated effluent from leaking underground storage tank remedial activities. [HAR, Chapter 11-55, Appendix D]

iv. Discharges of once through cooling water less than one (1) million gallons per day. [HAR, Chapter 11-55, Appendix E]

v. Discharges of hydrotesting water. [HAR, Chapter 11-55, Appendix F]

vi. Discharges of construction de-watering effluent. [HAR, Chapter 11-55, Appendix G]

vii. Discharges of treated effluent from well drilling activities. [HAR, Chapter 11-55, Appendix H]

viii. Discharges of treated effluent from recycled water distribution systems. [HAR, Chapter 11-55, Appendix J]

ix. Discharges of circulation water from decorative ponds or tanks. [HAR, Chapter 11-55, Appendix L]

3. In accordance with HAR, Section 11-55-38, the applicant for an NPDES permit is required to either submit a copy of the new NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHFPD), or demonstrate to the satisfaction of the Department that the project, activity, or site covered by the NOI or application has been or is being reviewed by SHFPD.

4. Any discharges related to project construction or operation activities, with or without a Section 401 WQC or NPDES permit coverage, shall comply with the applicable State Water Quality Standards as specified in HAR, Chapter 11-54.

To comply with applicable HAR, Chapter 11-54 requirements, we recommend that:

a. A site-specific construction Best Management Practices (BMPs) Plan shall be established and properly implemented for the proposed construction activity. The BMPs measures shall be designed, implemented, operated, and maintained by you in a manner to properly isolate and confine the construction activities and to contain and prevent any potential pollutant discharges from adversely impacting the State waters. It is your responsibility to ensure that the proposed construction work will not cause the applicable water quality criteria, as specified in HAR, Sections 11-54-4, 11-54-5, 11-54-6, 11-54-7, and 11-54-8, to be violated in the receiving State waters, including unained spring, Waiatolu Stream, Pearl Harbor and Pacific Ocean.

b. An applicable receiving water quality monitoring and assessment plan shall be properly designed and implemented to ensure the adequacy of the implemented BMPs measures and to demonstrate that the project construction and/or operation related discharge activities do not cause basic and applicable specific water quality criteria to be violated in the receiving State waters.

c. To comply with toxic material control requirements, your attention is specifically directed to the requirements contained in HAR, Paragraph 11-54-4(c)(9), and Subsection 11-54-4(o).

This letter is also served to inform you that HAR, Subsection 242D-50(o) requires that, "No person, including any public body, shall discharge any water pollutants into state waters, or cause or allow any water pollutant to enter state waters except in compliance with this chapter, rules adopted pursuant to this chapter, or a permit or variance issued by the director."
April 24, 2006

Dennis R. Lau, P.E., Chief
Clean Water Branch
Department of Health, State of Hawaii
919 Ala Moana, Room 300
Honolulu, Hawaii 96814

Dear Mr. Lau:

Subject: Proposed Affordable Housing
Vitality Wai'ahau District Park, Wai'ahau, Island of Oahu
TMC (1) 9-4-017: 658/DA File No. POH-2007-73

Thank you for reviewing the Draft Environmental Assessment for the proposed project. The following responses are offered in the order your comments were presented:

1. Clean Water Act
   If a Section 401 Water Quality Certification is required for an action requiring a Department of the Army permit, then an application for Water Quality Certification will be submitted to the Clean Water Branch, Department of Health.

2. NPDES Permits
   Applicant will apply for a NPDES Permit for activities associated with the construction of the proposed project.

3. State Historic Preservation Division
   A copy of the Notice of Intent or NPDES permit application will be submitted to the State Historic Preservation Division as stated.

4. Discharges Related to Construction and Operation Activities
   Your recommendations concerning preparation of Best Management Practices Plans, receiving water quality monitoring and assessment plan, and compliance with toxic material control requirements will be followed up on.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

cc: M. Kimura, PTA
    T. Schnell, PBR
April 6, 2006

Mr. Gerald Park
Gerald Park Urban Planner
1221 Kapiolani Boulevard, Suite 211
Honolulu, Hawaii 96814

Dear Mr. Park:

Subject: Plantation Town Apartments

Thank you for your February 27, 2006 letter, requesting our review of and comments on the draft environmental assessment for the subject project. We have the following comments regarding the document:

1. On Page 2, the last paragraph discusses access to the proposed project from Pa'ina Street. The two driveways proposed should be consolidated and aligned with Kilihau Place. In addition, the location of the driveway should also consider the existing bus stops on both sides of Pa'ina Street in the vicinity of Kilihau Place.

2. On Page 3, the third paragraph states that the applicant will be requesting an exemption from the Land Use Ordinance (LUC) requirement that a minimum of 426 resident parking stalls be provided. The number of parking stalls being provided should be in accordance with the LUC.

Should you have any questions regarding these comments, please contact Ms. Faith Miyamoto of the Transportation Planning Division at 577-6970.

Sincerely,

[Signature]

MELVIN N. KAKU
Acting Director

GERALD PARK
Urban Planner

April 24, 2006

Melvin N. Kaku, Acting Director
Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, Hawaii 96813

Subject: Plantation Town Apartments

Thank you for reviewing and commenting on the Draft Environmental Assessment for the subject project. The following responses are offered in the order your comments were presented.

1. Extending Ka'ena Place to intersect with Pa'ina Street was considered. It was decided, however, to provide separate residential driveways to Pa'ina Street and Ka'ena Place. An extension would have created a "through" street for vehicles on Pa'ina Street and Ka'ena Place. Aligning the street below the location of the two buildings would have separated the buildings from parking areas requiring residents to cross a street to gain their vehicles or their residence.

A street aligned on the inside side of the Plantation Town Apartments would be too close to the project buildings and adjoining residential lots. Without adequate setbacks on both sides of the street, vehicle traffic and noise would adversely affect public health and safety and the health of project residents and residents on Naol Street. A road at this location also would have taken up too much of the land area suitable for development.

2. The project provides 488 parking spaces which is less than the 426 parking stalls required by the LUC. The project provides one parking stall for each of the 148 2BR units and 148 1BR units and two parking stalls are allotted for the 44 2BR units for a total of 374 stalls. Twelve parking stalls are for the condominium association.

The participation of the Department of Transportation Services in the environmental review process is appreciated.

Sincerely,

GERALD PARK
Urban Planner

C. Kimura, PTA
T. Schnell, PBR
April 4, 2006

Mr. Gerald Park
Urban Planner
1221 Kapolei Parkway, Suite 211
Kaneohe, Hawai‘i 96744

Dear Mr. Park:

SUBJECT: Chapter 65-8 Historic Preservation Review (State) — Draft Environmental Assessment — Plantation Town Apartments (Walpahal)

Walpahal, Ewa District, Island of O‘ahu

Draft Environmental Assessment (EIA)

Thank you for the opportunity to review the aforementioned project, which we received on March 2, 2006. The project involves the construction of a multi-family, affordable residential housing complex on state-owned land in the town of Walpahal.

We believe that no historic properties will be affected by this undertaking because:

- a) intensive cultivation has altered the land
- b) residential development/urbanization has altered the land
- c) previous grubbing/grading has altered the land
- d) an acceptable archaeological assessment or inventory survey found no historic properties
- e) the project has gone through the historic review process and mitigation has been completed
- f) other: A previous study by Cultural Survey of Hawaii’s (Historical Background Summary of an Approximately 45,000-Sq. Ft. Parcel in Wai‘alae Town, Wai‘alae Aloha, O‘ahu) found there is little to no chance of historically-significant sites in the general area.

If historic resources, including human skeletal remains, are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the SHPD needs to be contacted immediately at (808) 692-8015.

Aloha,

[Signature]
Maile Chin, Administrator
State Historic Preservation Division

CM
April 24, 2006

Deborah Kim Morikawa, Director
Department of Community Services
City and County of Honolulu
715 South King Street, Suite 311
Honolulu, Hawaii 96813

Dear Ms. Morikawa:

Subject: Draft Environmental Assessment
Plantation Town Apartments: TMK 9-4-017, Portion 038

Thank you for reviewing the Draft Environmental Assessment for the Plantation Town Apartments in Waipahu, Oahu. We have reviewed the document and find this project will substantially add to the inventory of affordable multi-family residential units on Oahu. Specifically, we note that two residential towers of 165 units each will be constructed adding 330 units to Oahu’s affordable housing inventory.

We are pleased that all units will be sold as the single at prices affordable to households earning between 80% to 120% of the State of Hawaii’s median income. The subject project is consistent with the City and County of Honolulu’s policy of supporting affordable housing opportunities for our citizens.

The final environmental assessment should more fully describe the project’s housing program in terms of projected sales prices, marketing and outreach to potential purchasers, and how long-term affordability will be maintained such as the use of buy-back provisions or shared appreciation provisions.

Thank you for providing us the opportunity to review and comment on this draft environmental assessment. Please call Mr. Stephen Kawel at 323-4609 should you have any questions.

Sincerely,

Deborah Kim Morikawa
Director

cc: M. Hirose, PTA
T. Schaal, PBR
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Memo:

From: JESS KAIPABA
To: 
Copy to: Consulting Geologist

Subject: Re: Hashimoto Tunnel

To all MPAP residents:

1. The project is in the planning stage, and I am a consultant to the developer.

2. This project is not part of the MPAP, but it is being considered for inclusion.

3. I am not aware of the project's full scope.

4. I am not sure if the project will include a tunnel.

5. I will follow up with more information as soon as possible.

Thank you,

JESS KAIPABA
To all the government agencies and developers of the Waipahu Plantation Town Apartments (22.9 acres),
Mokula Vista Apartments (1.394 acres) projects, we the undersigned residents do now declare our opposition

1. Massive size of the buildings, air quality and (especially height variances), massive pollution, prohibitive
   vehicular congestion, infrastructure overload, population density overload and general noise pollutants,
   also, construction debris, dust and noise (lengthy massive pile driving), irritants.

2. We also object to minimum visibility and public input offered by the developers.

3. We are open to a substantial reduction of the size of these projects.

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<td>Michelle Costa</td>
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<td>Jerry Paulson</td>
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<td>Lisa Paulson</td>
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April 2009
Waipahu, Hawaii

To all the government agencies and developers of the Waipahu Plantation Town Apartments (22.9 acres),
Mokula Vista Apartments (1.394 acres) projects, we the undersigned residents do now declare our opposition

1. Massive size of the buildings, air quality and (especially height variances), massive pollution, prohibitive
   vehicular congestion, infrastructure overload, population density overload and general noise pollutants,
   also, construction debris, dust and noise (lengthy massive pile driving), irritants.

2. We also object to minimum visibility and public input offered by the developers.

3. We are open to a substantial reduction of the size of these projects.

April 2009
Waipahu, Hawaii

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<td>Robert Martin</td>
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on these above-named projects. Our basic concerns are the following:

1. Massive size of the buildings, air quality and (especially height variances), massive pollution, prohibitive
   vehicular congestion, infrastructure overload, population density overload and general noise pollution.
   Also, construction debris, dust and noise (lengthy-massive pile driving), irritants.
2. We also object to minimum visibility and public input offered by the developers.
3. We are open to a substantial reduction of the size of these projects.

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<td>Edward Tabano</td>
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<td>Don't want bulky towers</td>
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<td>Francis Tabano</td>
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<td>Elaine K. Nakamura</td>
<td>99-1037 Kalihi St</td>
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<td>Don't want low-income units</td>
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April 2006
Waipahu, Hawaii

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<td>Shoko Temchan</td>
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April 24, 2006

Jesse Kajiwara
94-679 Nahil Street
Waipahu, HI 96797

Dear Mr. Kajiwara:

Subject: Plantation Town Apartments

TMK 9-4-017; por. 59
Waipahu, Ewa District, Oahu

I received the petition signed by you and your neighbors residing on Nahil Street, Palawa Street, Hau Street, H Place, and Kakahanaul Street. I am responding to you and will mail copies of this response to all who signed the petition.

1. During construction the general contractor will take required measures to control fugitive dust, noise generation, and wind blown debris. Measures will also be implemented to intercept construction related runoff from entering nearby Waipahu Stream and from being deposited on adjoining streets. Pile driving is required and is anticipated to last no more than 3 months. The developer is also investigating alternatives to pneumatic pile driving that would not produce excessive noise and vibration. The general contractor will alert neighbors of pile driving activities before this activity begins.

During the planning stages for the project, the adequacy of the existing infrastructure to accommodate the project was evaluated. Managing authorities for the respective utility system have indicated that existing water, sewer, and electrical systems can serve the development. The existing drainage system is satisfactory but City regulations require the development to not generate runoff in excess of that which is generated under existing conditions. In addition, site generated runoff needs to be retained on-site.

The project will provide 320 clean, safe, and comfortable housing units at affordable prices. The affordable market for this project is households earning between 80 and 120 percent of the State of Hawaii median income and who can qualify for a residential mortgage. The units are not rental units and are not targeted for low-income households.

At 12-stories in height, the building would rise about 105 above ground. This height exceeds the height limit for the residential zoning district and the 60-foot height limit proposed for medium density apartments in the Central Oahu Sustainable Communities Plan. This impact cannot be avoided. The height and density of the two buildings is determined in part by soil conditions on the property. The northern half of the site where the two buildings are to be located is the only suitable area on-site. The southern half of the property is underlain by soft, compressible soils hence this area is set aside for parking. A second factor for the height and density is the Housing and Community Development Corporation goal to provide the maximum number of affordable housing units using the minimum amount of State resources for this development.

The project is estimated to have a population of between 800 to 900 residents when occupied. It is anticipated that many of the future residents already are living in Waipahu and would move into the project for personal and economic reasons.

A Traffic Impact Report was prepared for the Plantation Town Apartment project. The study concluded that the traffic to be generated by the project will not adversely affect the Levels of Service on Palawa and Makaula Streets and the studied intersections. The project will contribute an estimated 1.2% increase in total traffic volume during AM and PM peak hours. The increase in total traffic volume is in the range of daily volume fluctuations along both streets and represents a minimal increase in the overall traffic demand.

2. The developers of the Plantation Town Apartments commenced a community outreach program in February to inform the neighborhood of the development. A representative of the developer walked the neighborhood and spoke with residents and distributed flyers describing the project. The flyer also informed residents that the project would be presented at the March 23, 2006 meeting of the Waipahu Neighborhood Board.

About ten days prior to the Neighborhood Board meeting, the developer conducted a mass mailing to again inform nearby residents of the Waipahu Neighborhood Board meeting scheduled for March 23, 2006. The flyer was mailed to property owners within 300 feet of the project site. At the Neighborhood Board meeting, the developer briefed the public about the project and resident concerns were heard.

3. A response is not offered for this comment.

A copy of the Final Environmental Assessment prepared for the Plantation Town Apartments is enclosed. The impacts cited in your petition and the concerns of your neighbors are discussed in the document.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

Enclosure: Final Environmental Assessment (J. Kajiwara Only)

c: M. Kimura, PTA
T. Schnell, PBR