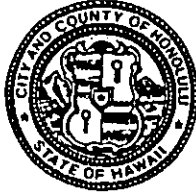


Kaneohe WW Preliminary Treatment  
Facility Modification Phase IIIA

DEPARTMENT OF DESIGN AND CONSTRUCTION  
**CITY AND COUNTY OF HONOLULU**

850 SOUTH KING STREET, 2ND FLOOR  
HONOLULU, HAWAII 96813  
PHONE: (808) 523-4564 • FAX: (808) 523-4567

JEREMY HARRIS  
MAYOR



September 11, 1998

RECEIVED

RANDALL K. FUJIKI, AIA  
DIRECTOR

'98 SEP 14 P12:02

ROLAND D. LIBBY, JR., AIA  
DEPUTY DIRECTOR

DCP 98-219

OFFICE OF ENVIRONMENTAL  
QUALITY CONTROL

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

Dear Mr. Gill:

Subject: Finding of No Significant Impact (FONSI) for the Kaneohe Wastewater Preliminary Treatment Facility (WWPTF) Modifications Phase IIIA, Oahu, Hawaii, TMK: 4-5-30:36

The Department of Design and Construction (DDC), City and County of Honolulu, is the proposing agency and accepting agency for the subject project. The DDC has reviewed and responded to comments related to the draft environmental assessment for this project. The 30-day review period began on July 8, 1998. The DDC has determined that the implementation of this project will not have significant environmental effects. Therefore, the agency is issuing a FONSI. Please publish this notice in the September 23, 1998 Environmental Notice. We have enclosed a completed OEQC Bulletin Publication Form and four copies of the final EA.

Identification of Proposing Agency:

The Department of Design and Construction, City and County of Honolulu

Identification of Accepting Agency:

The Department of Design and Construction, City and County of Honolulu

Brief Description of Proposed Action:

This project is to upgrade the Kaneohe WWPTF facilities to increase the pumping capacity of the facility and to improve the overall reliability of the facility. Past equipment failures were the primary causes of the most recent dry weather spills. The proposed modifications to the facility involve the replacement of equipment and the demolition and/or refurbishment of the existing facilities. The following modifications will be made in Phase IIIA: Provide new offsite water line, replace aboveground fuel tank, replace Effluent Pump Station (EPS) pumps to increase capacity, replace force main header and add venturi meter, add new variable frequency drive at EPS, replace Influent Pump Station (IPS) motors and impellers to increase capacity and, replace IPS bar screens and add new bypass screening channel to improve efficiency.

Determination:

Findings of No Significant Impact

116

Reasons Supporting Determination:

This determination is based on the significance criteria listed in §11-200-12 of the Environmental Impact Statement Rules. Specifically, these significance criteria are addressed below:

1. Development of this project will involve the irrevocable loss of certain environmental resources. However, the costs associated with the use of these resources should be evaluated in light of recurring benefits through increased operational capacity and safety by the proposed modifications of the WWPTF.
2. This project will not curtail the range of beneficial uses of the environment. The surrounding property is used for a golf course. This project will not interfere with this recreational facility except for the short-term impacts of increased noise and traffic due to the construction activity.
3. This project would be in conformance to the Chapter 344, HRS, State Environmental Policy. This project will increase safety and aesthetics of the existing wastewater treatment facility.
4. The proposed modification of the WWPTF is not anticipated to have significant effects on the area's economic activities or social welfare of the community or state.
5. The primary objective of this project is to minimize the risk of wastewater spills by replacing aging equipment and increasing pumping capacity. This project is not anticipated to have substantial effects on public health. Drainage easements and stream buffers will be maintained along Kaneohe and Kawa Streams. A number of provisions will be provided to reduce the probability of wastewater spills as described in Section 2.1.5. (of the Final EA). This project is not anticipated to have significant effects on the water quality of streams, wetlands and the bay.
6. This project is not anticipated to result in substantial secondary impacts, such as population changes or effects on public facilities.
7. This project is not anticipated to involve a substantial degradation of environmental quality. The project requires a very minimum clearing and grubbing. In addition, the site has been disturbed for the construction and operation of the existing facilities, and the surrounding area has been highly modified.
8. This project is not anticipated to result in cumulative effects; therefore, it would not involve a commitment to larger actions.
9. This proposed project is not anticipated to have substantial effects on rare, threatened, or endangered species, or their habitats. Since the area has been modified long ago, this project is not likely to encounter any rare, threatened, or endangered species.
10. This project is not anticipated to result in significant effects on the area's long-term air or water quality or ambient noise levels.
11. The project site is situated in a plain that has been subject to flooding and is within the SMA. However, this project will not alter existing drainage patterns or shoreline configurations.

Mr. Gary Gill  
Page 3  
September 11, 1998

12. The Kaneohe WWPTF modification will not significantly affect the area's visual resources. All facilities and modifications will be designed and constructed in compliance with City and County development standards. The architectural and landscaping features of the proposed facilities will be chosen to minimize visual impacts on the area.
13. This project is not anticipated to result in substantial energy consumption.

Should you have any questions, please contact the following persons:

Proposing Agency: Ms. Stephanie Dodge  
Department of Design and Construction  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813  
(808) 527-6865

Consultant: Ms. Colette Sakoda  
R. M. Towill Corporation  
420 Waiakamilo Road, Suite 411  
Honolulu, Hawaii 96817  
(808) 842-1133

Very truly yours,



RANDALL K. FUJIKI  
Director

**Attachments**

cc: Dr. Kenn Sprague, ENV (w/o Attachment)  
Mr. Scott Schultz, ENV (w/o Attachment)  
Mr. Po Chan, DDC (w/o Attachment)  
Ms. Stephanie Dodge, DDC (w/o Attachment)

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1998-10-08-0A-FEA-Kaneohe Wastewater  
Preliminary Treatment Facility Modifications

OCT 8 1998

FILE COPY

ENVIRONMENTAL ASSESSMENT

Phase III A

Prepared in Accordance with Requirements of Chapter 343, Hawaii Revised Statutes

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**KANEOHE WASTEWATER PRELIMINARY  
TREATMENT FACILITY (WWPTF)  
MODIFICATIONS PHASE IIIA  
Kaneohe, Oahu, Hawaii**

SEPTEMBER 1998

Prepared For:

Department of Design and Construction  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Prepared By:

R. M. Towill Corporation  
420 Waiakamilo Rd., Suite 411  
Honolulu, Hawaii 96817  
Voice: (808) 842-1133  
Fax: (808) 842-1937  
(Ref: 1-17565-3-E)

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DEPARTMENT OF DESIGN AND CONSTRUCTION

CITY AND COUNTY OF HONOLULU

**FINAL**

ENVIRONMENTAL ASSESSMENT

FOR

**KANEOHE WASTEWATER PRELIMINARY TREATMENT  
FACILITY (WWPTF) MODIFICATIONS PHASE IIIA**

AT  
KANEOHE, OAHU, HAWAII  
TMK: 4-5-30:36

SEPTEMBER 1998

PROPOSING AGENCY: DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU  
650 SOUTH KING STREET  
HONOLULU, HAWAII

RESPONSIBLE OFFICIAL: *Randall K. Fujiki* SEP 14 1998  
RANDALL K. FUJIKI DATE

Prepared By: R. M. TOWILL CORPORATION  
420 WAIKAMILO ROAD, SUITE 411  
HONOLULU, HAWAII 96817-4941

THIS ENVIRONMENTAL DOCUMENT IS SUBMITTED PURSUANT TO CHAPTER 343, HRS.

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DEPARTMENT OF DESIGN AND CONSTRUCTION

CITY AND COUNTY OF HONOLULU

**FINAL**

ENVIRONMENTAL ASSESSMENT

FOR

**KANEOHE WASTEWATER PRELIMINARY TREATMENT  
FACILITY (WWPTF) MODIFICATIONS PHASE IIIA**

AT

KANEOHE, OAHU, HAWAII  
TMK: 4-5-30:36

AUGUST 1998

PROPOSING AGENCY: DEPARTMENT OF DESIGN AND CONSTRUCTION  
CITY AND COUNTY OF HONOLULU  
650 SOUTH KING STREET  
HONOLULU, HAWAII

RESPONSIBLE OFFICIAL: \_\_\_\_\_ DATE \_\_\_\_\_  
MR. RANDALL K. FUJUKI

Prepared By: R. M. TOWILL CORPORATION  
420 WAIKAMILO ROAD, SUITE 411  
HONOLULU, HAWAII 96817-4941

THIS ENVIRONMENTAL DOCUMENT IS SUBMITTED PURSUANT TO CHAPTER 343, HRS.

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## **EXECUTIVE SUMMARY**

### **PROJECT BACKGROUND**

The Kaneohe Wastewater Preliminary Treatment Facility (WWPTF) Modifications, Phase IIIA, was initiated by the City and County of Honolulu Department of Wastewater Management (WWM). The primary objective of the proposed upgrade is to minimize the risk of wastewater spills by replacing aging equipment and increasing pumping capacity. The construction of an offsite water line is also proposed since the existing system periodically does not meet pressure and/or flow requirements. This water line will supply the existing and future potable and non-potable water needs of the facility.

### **DESCRIPTION OF PROJECT**

The Kaneohe WWPTF is located on a 15-acre site between Kaneohe and Kawa Streams near Kaneohe Bay. The Kaneohe WWPTF, previously a secondary treatment plant was converted to a preliminary treatment facility in 1994. The facility now provides screening, grit removal and intermittent temporary storage for the wastewater.

The Kaneohe Wastewater Preliminary Treatment Facility (WWPTF) Modifications, Phase IIIA, was initiated by the Department of Wastewater Management (WWM) for the following reasons:

- Inadequate pumping capacity to meet current and projected peak flows
- Aging and unreliable mechanical and electrical equipment at the effluent pump station
- Inadequate water supply used to cool and lubricate key wastewater pumps and emergency generators
- Aging diesel tank used to supply fuel to emergency generator and emergency engines for the effluent pumps
- Frequent spills and bypasses due to equipment malfunctions

Facilities affected by this project are shown in Table 1.

A majority of the site had been previously modified for the construction and operation of the existing WWPTF so limited earthwork to the site grades and drainage patterns will be required. The proposed project will also have minimal impacts on existing topographic and hydrologic conditions. The modifications are also not anticipated to have a significant impact on water quality, air quality, existing utilities, noise, archaeological sites, or wildlife habitat.

The proposed project will require numerous City and County permits and approvals including a Building Permit and a Combustible and Flammable Liquids Tank Installation Permit, and approvals

**EXECUTIVE SUMMARY**

from the Department of Design and Construction, Board of Water Supply, and Department of Planning and Permitting. State permits include a National Pollution Discharge Elimination System (NPDES) permit and State approvals by agencies such as State Department of Health (DOH) and Commission on Persons with Disabilities. Construction and modifications are scheduled for early 1999 and estimated at approximately \$3,000,000.

Table 1 KANEHOE WWPTF MODIFICATIONS PHASE IIIA		
	IMPROVEMENTS	DESCRIPTION
<b>EXISTING FACILITIES TO BE REFURBISHED</b>	Influent Pump Station and Screening Facility	<ul style="list-style-type: none"> <li>• Increase pump capacity from 20 mgd to 25 mgd</li> <li>• Replace existing bar screens and add bypass screening channel</li> </ul>
	Effluent Pump Station	<ul style="list-style-type: none"> <li>• Increase pump capacity from 23 mgd to 26 mgd</li> <li>• New pump station parallel header piping</li> <li>• New venturi meter</li> <li>• Add 150 gallon diesel fuel day-tank</li> </ul>
	Diesel Fuel Tank	<ul style="list-style-type: none"> <li>• Replace existing fuel tank to 5,200 gallon aboveground steel tank with leak detection</li> <li>• Double-wall FRP piping with leak detection</li> </ul>
	Site Work	<ul style="list-style-type: none"> <li>• Re-route portions of various lines as needed</li> </ul>
<b>NEW FACILITIES / CONSTRUCT.</b>	Potable Water line	<ul style="list-style-type: none"> <li>• New water supply line from outside of plant &amp; looping within</li> </ul>
	Trailer Pad for Portable Emergency Generator	<ul style="list-style-type: none"> <li>• Trailer pad for portable emergency generator to be located near existing EPS</li> </ul>

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## **SECTION 1**

### **Project Background**

#### **1.1 BACKGROUND**

The Kaneohe Wastewater Preliminary Treatment Facility (WWPTF) is situated on a 15-acre site located in Kaneohe on the Island of Oahu. The Kaneohe WWPTF was previously a secondary treatment plant utilizing a trickling filter process for wet stream treatment and anaerobic digestion for solids stabilization. The facility was converted in 1994 to a preliminary treatment facility providing screening and grit removal.

The City and County of Honolulu Department of Design and Construction (DDC) plans to upgrade the Kaneohe WWPTF. The purpose of this report is to explain and identify the proposed upgrades for the facility. The primary objective of the proposed upgrade is to minimize the risk of wastewater spills by replacing aging equipment and increasing pumping capacity at the facility. Major new work will include the construction of an offsite water line which will be used to supply existing and future potable and non-potable water needs of the facility. The facility is presently provided for by a 2-inch and a 6-inch water line. The existing water supply system periodically does not meet pressure and/or flow requirements. In addition, the frequency of water line breaks has increased in the past year.

The property is owned by the City and County of Honolulu. The existing influent and effluent pump station modifications and other upgrades to be made are located within the Special Management Area (SMA). The SMA use permit was granted in 1988, for Phase II of the development. The proposed development is Phase IIIA of the on-going Kaneohe WWPTF modification project, and covered under the same SMA granted for the project in 1988. Due to the use of City and County funds for development, this project is subject to Chapter 343, Hawaii Revised Statutes, pursuant to Chapter 200, Title 11, Hawaii Administrative Rules, as amended.

This Environmental Assessment is being prepared to address the environmental impacts anticipated for this project. A detailed "Water System Report for the Kaneohe Wastewater Preliminary Treatment Facility Modifications, Phase III" November 1997, RMTTC, is included as reference under separate cover for specific project and system information. Also, a "Engineering Report (PER) on the Kaneohe WWPTF modifications" will be available for reference.

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## SECTION 1 - Project Background

### **1.2 GENERAL DESCRIPTION**

The project area is located on the windward coast of the Island of Oahu (Figure 1). The site is situated within the judicial District of Koolauloa and identified as Tax Map Key (TMK): 4-5-30:36. Kaneohe Bay is located to the northeast of the property (Figure 2). Immediately adjacent to the property is the 18-hole Bay View Golf Course. Kaneohe and Kawa Streams run north and south of the project site, respectively. The project will involve the construction of new facilities, and refurbishment and/or demolition of the existing facilities. The work involving the influent and effluent pump stations, headworks, and fuel tank are located on the eastern half of the property. The project will maintain drainage easements along Kaneohe and Kawa Streams.

### **1.3 LAND USE APPROVALS GRANTED OR REQUIRED**

The property is in the State Urban District. The City and County Zoning is I-2 "Intensive Industrial" and P-2 "General Preservation" (Figure 3). The entire project is located within the special management area (SMA) as designated by City and County of Honolulu Ordinance Section 25-2.2 (see Figure 2). The proposed project is Phase IIIA of the on-going Kaneohe WWPTF modification project. The SMA use permit was granted for Phase II of the project in 1988. The proposed project is Phase IIIA of the on-going Kaneohe WWPTF modification project, and covered under the same SMA granted for the project in 1988.

Prior to the Department of Planning and Permitting (DPP)'s acceptance of the SMA Use Permit application, the acceptance of a final Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) is required.

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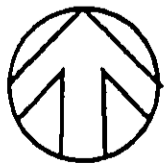
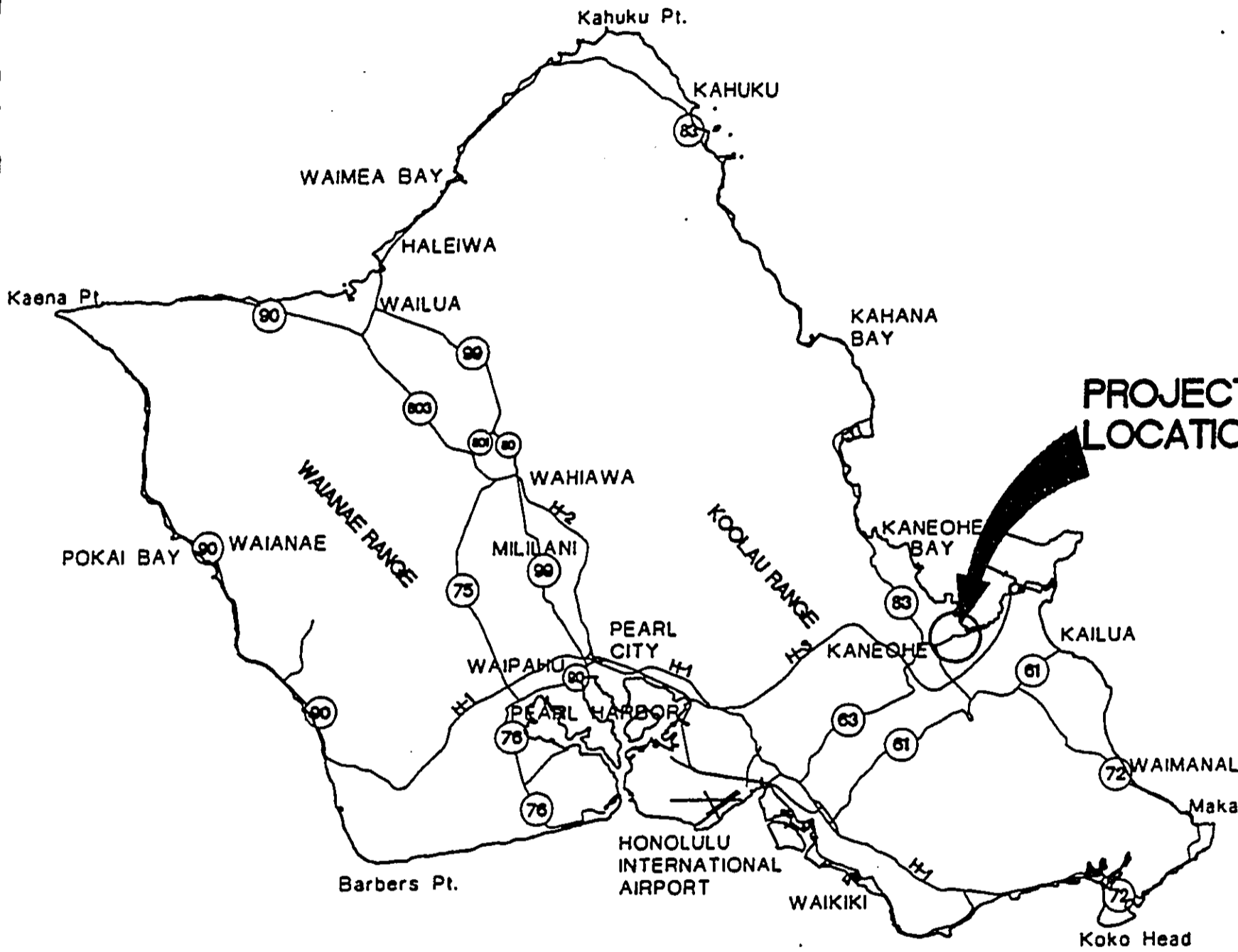
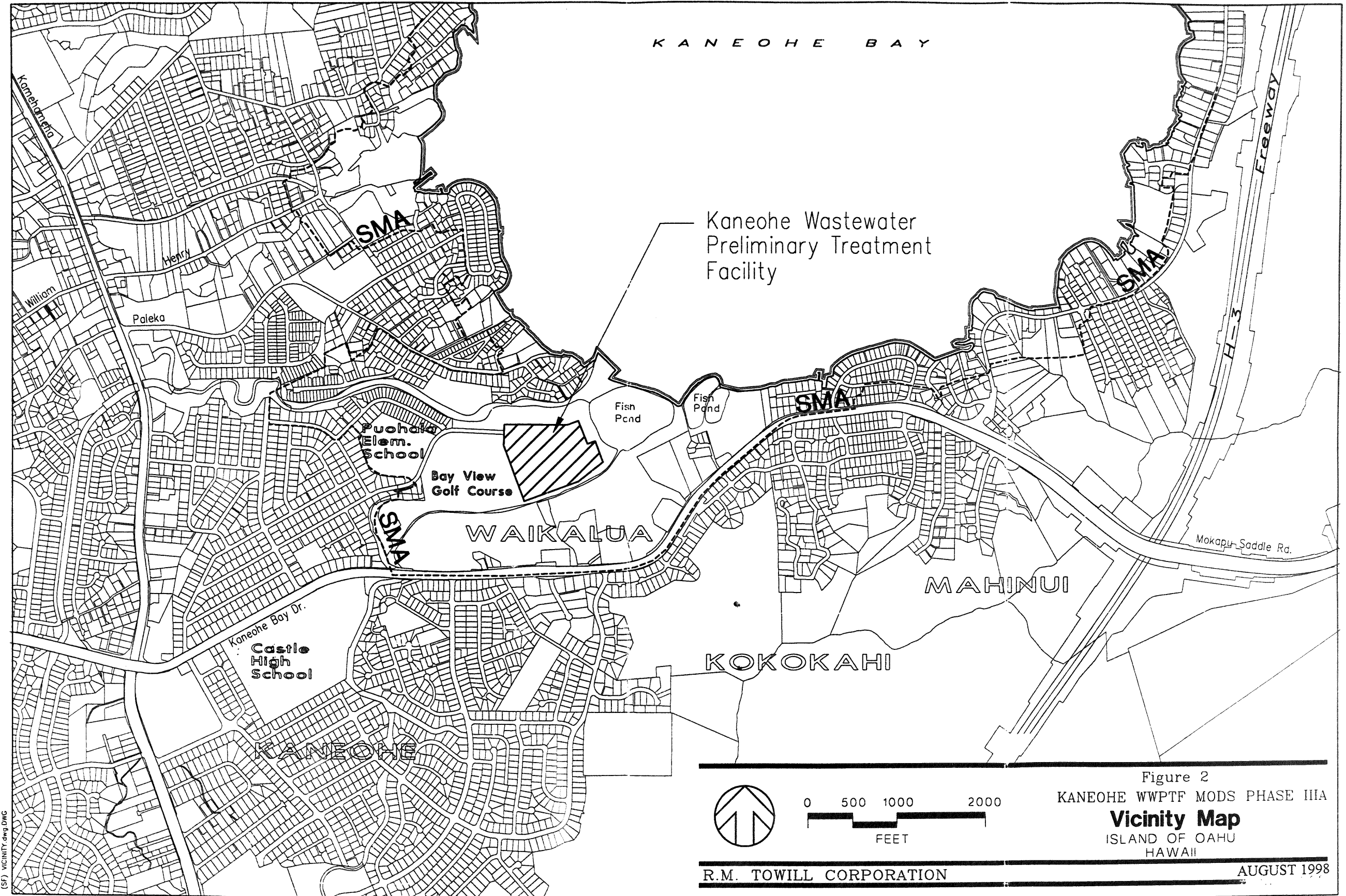


Figure 1  
KANEHOE WWPTF MODS PHASE IIIA  
**Location Map**  
ISLAND OF OAHU  
HAWAII



(SF) VICINITY.dwg.DWG

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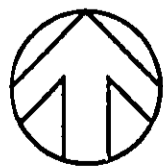
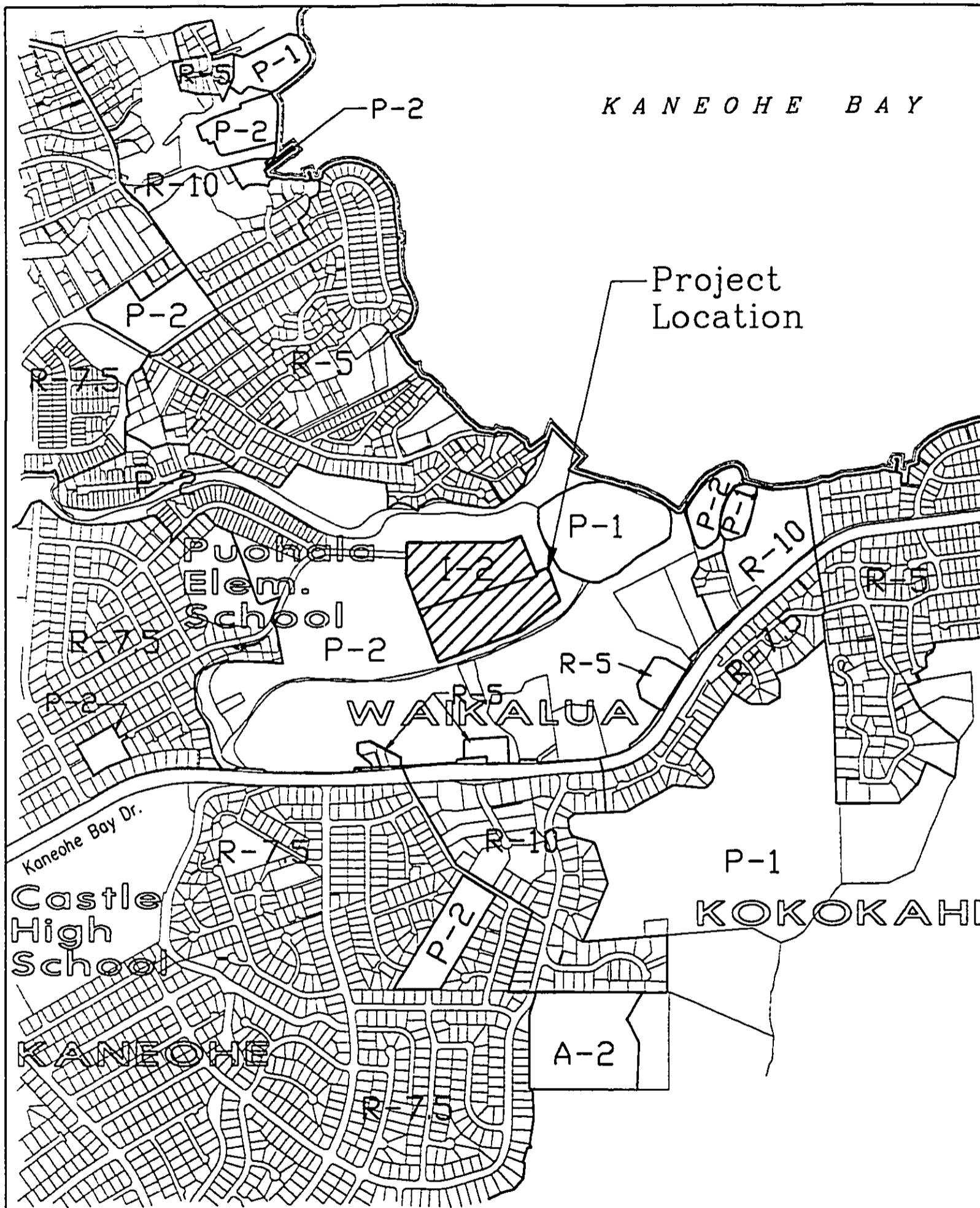


Figure 3  
KANE OHE W W P T F M O D S P H A S E I I I  
**Zoning Map**  
I S L A N D O F O A H U  
H A W A I I

## SECTION 2

### Description of Project

#### 2.1 TECHNICAL CHARACTERISTICS

##### 2.1.1 PROJECT CHARACTERISTICS

The Kaneohe WWPTF, initially constructed as a secondary treatment plant, has been modified to a preliminary treatment plant and pumping facility since October 1994. Most of the facilities constructed for secondary treatment purposes are no longer in service but are maintained for intermittent temporary storage facilities for wastewater.

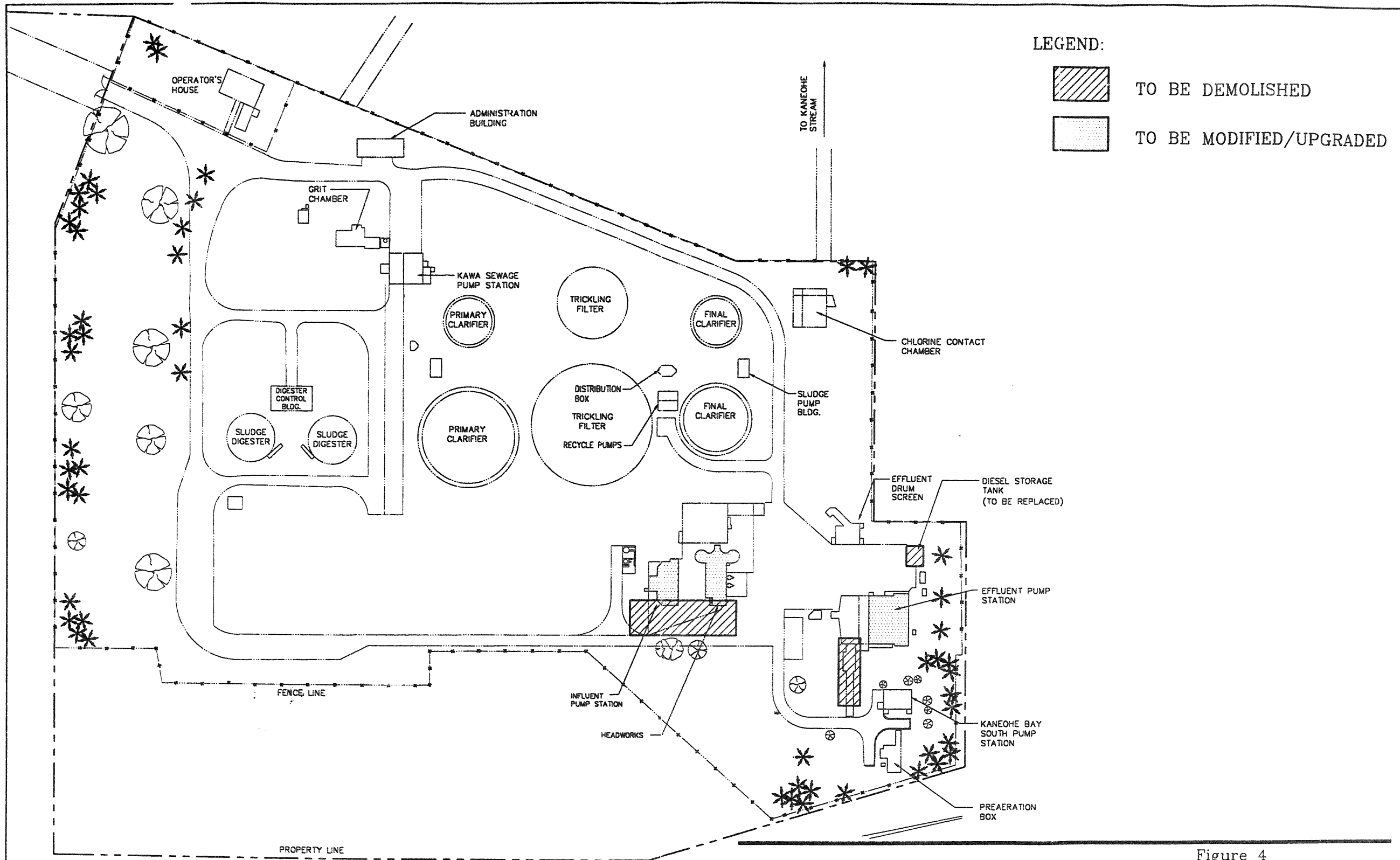
The purpose of this project is to upgrade the Kaneohe WWPTF facilities to increase the pumping capacity of the facility and to improve the overall reliability of the facility. Past equipment failures were the primary causes of the most recent dry weather spills. The proposed modifications to the facility involve the replacement of equipment and the demolition and/or refurbishment of the existing facilities. The following modifications will be made in Phase IIIA:

- Provide new offsite water line
- Replace aboveground fuel tank
- Replace Effluent Pump Station (EPS) pumps to increase capacity
- Replace force main header and add venturi meter
- Add new variable frequency drive at EPS
- Replace Influent Pump Station (IPS) motors and impellers to increase capacity
- Replace IPS bar screens and add new bypass screening channel to improve efficiency.


The Kaneohe WWPTF contains approximately fifteen (15) acres of land. Facilities affected by the project were listed previously in **Table 1**. All areas that need to be demolished are shown in **Figure 4**. All modifications are in the eastern half of the property as shown in **Figure 5**.

The project will include a potable water line system upgrade to meet the existing and future needs for potable water at the Kaneohe WWPTF. The current system covers the area from Kapunahala Elementary School to Puohala Elementary School (**Figure 6**). The current system consisting of a 6-inch pipe network and a 2-inch pipe network does not meet pressure and/or flow requirements. The proposed potable water line will extend approximately 4,000 lineal feet within the Right-of-Way (ROW) of Wena and Kulauli Street to the WWPTF. The new water system will be connected to the existing system at two points, existing fire hydrants on Wena and Kulauli Streets. The new water system will utilize the water network of the 272' System elevation, at the Kapunahala Reservoir. The proposed improvement of the water system is necessary to provide an adequate water supply





**LEGEND:**

 TO BE DEMOLISHED


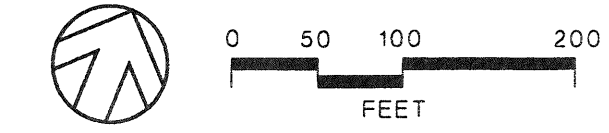
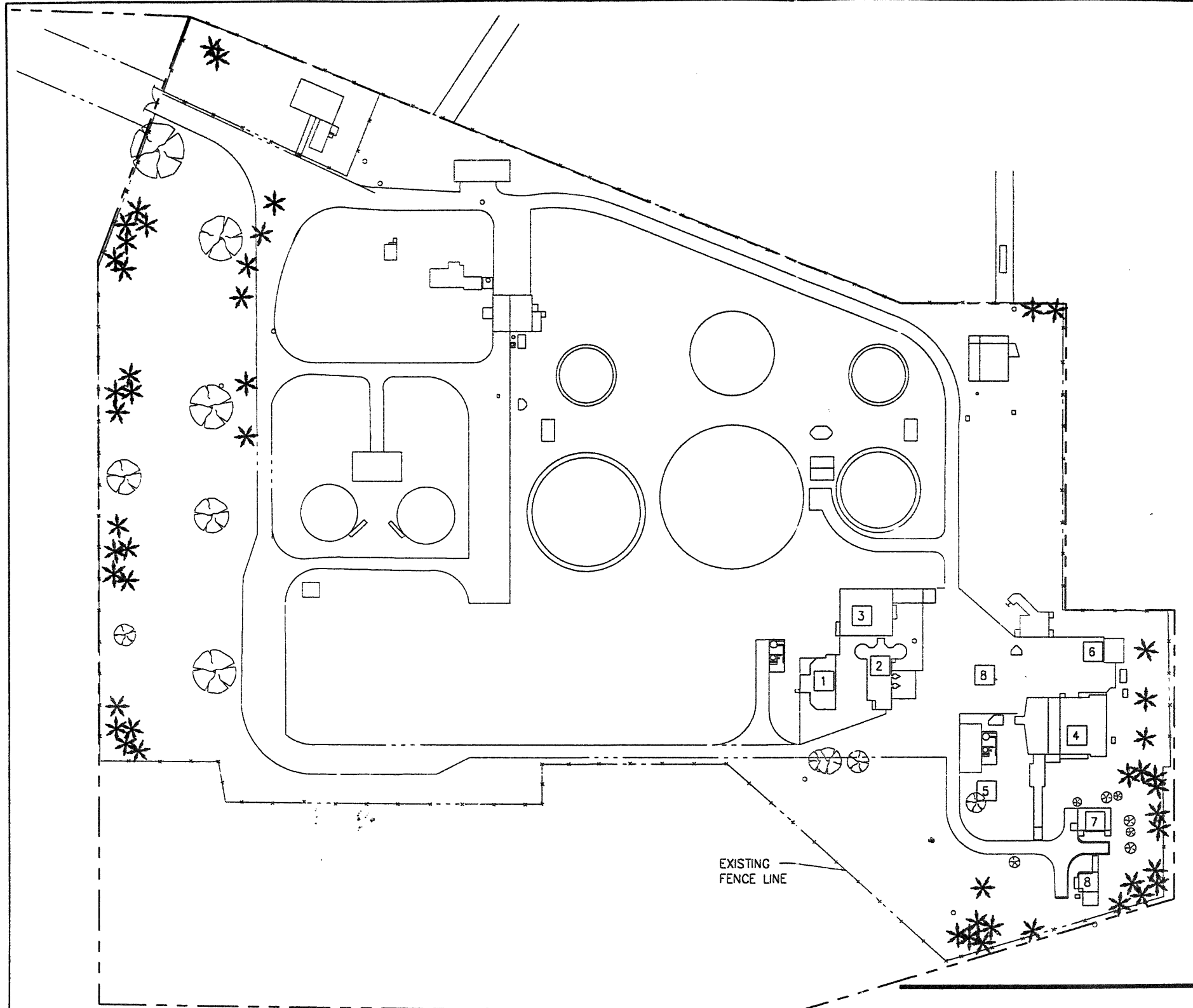
 TO BE MODIFIED/UPGRADED

Figure 4  
 KANEOHE WWPTF MODS PHASE IIIA  
**Demolition Plan**  
 ISLAND OF OAHU  
 HAWAII





BLDG NO.	STRUCTURES
1	INFLUENT PUMP STATION
2	HEADWORKS
3	GRIT HANDLING BLDG
4	EFFLUENT PUMP STATION
5	EFFLUENT ODOR CONTROL SYSTEM
6	EMERGENCY GENERATOR FUEL TANK
7	KANEOHE BAY SOUTH PUMP STATION
8	KANEOHE BAY SOUTH HEADWORKS

EXISTING FENCE LINE

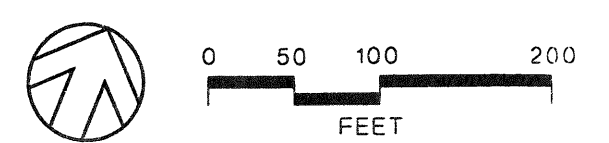
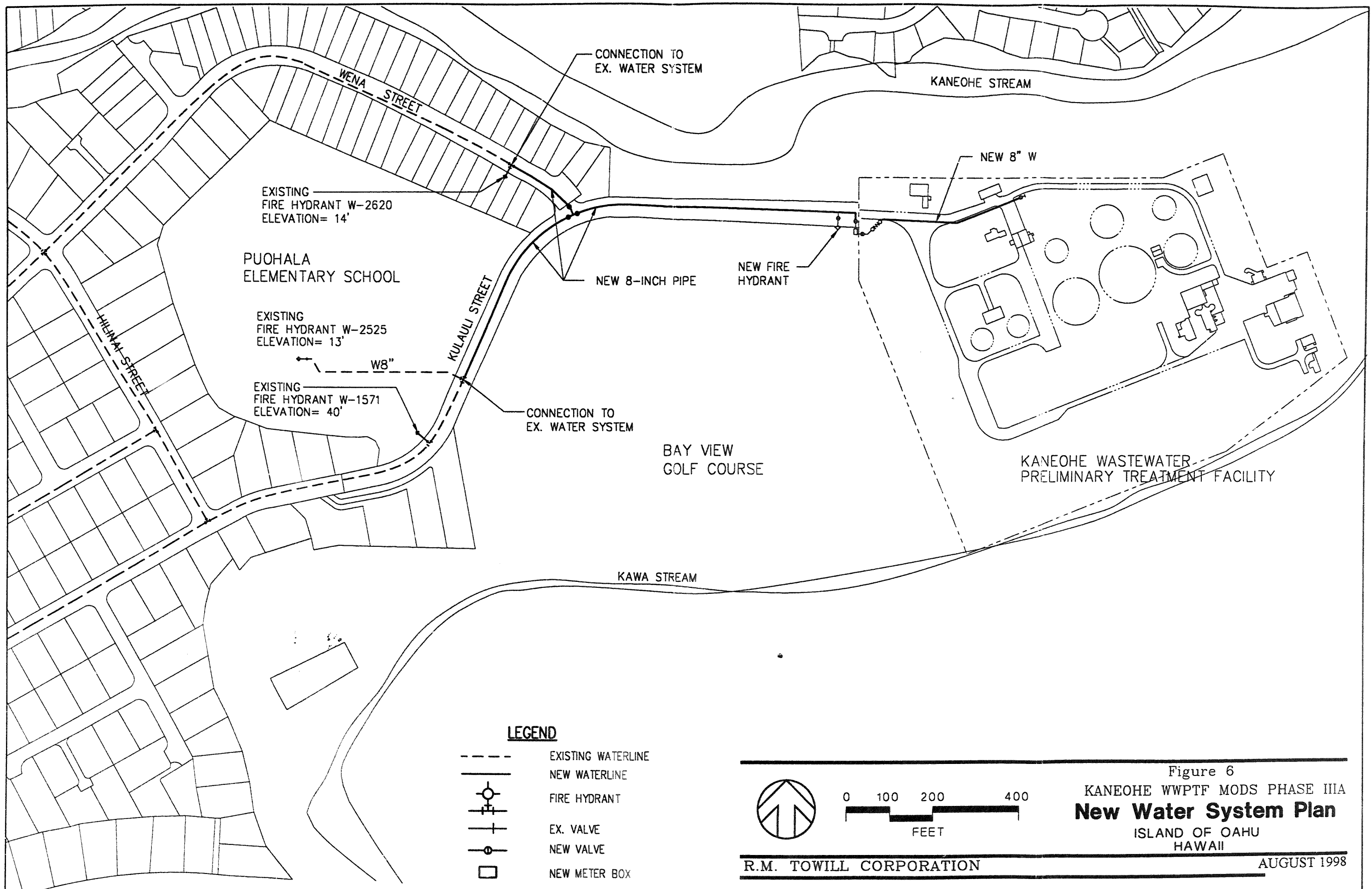


Figure 5  
 KANEOHE WWPTF MODS PHASE IIIA  
**Site Plan**  
 ISLAND OF OAHU  
 HAWAII



**LEGEND**

- EXISTING WATERLINE
- NEW WATERLINE
- ⊕ FIRE HYDRANT
- ⊕ EX. VALVE
- ⊕ NEW VALVE
- NEW METER BOX

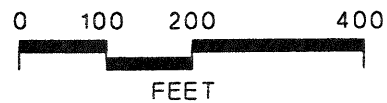
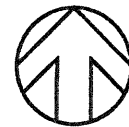


Figure 6  
 KANEOHE WWPTF MODS PHASE IIIA  
**New Water System Plan**  
 ISLAND OF OAHU  
 HAWAII

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## SECTION 2 - Description of Project

to cool and lubricate key wastewater pumps and emergency generators.

The Kaneohe WWPTF has access via Kaneohe Bay Drive, Puohala Street, and Kulauli Street. Kulauli Street provides the direct access to the facility. Kulauli Street is under the jurisdiction of the City and County of Honolulu Department of Transportation Services (DTS).

### **2.1.2 CONSTRUCTION CHARACTERISTICS**

A majority of the construction will be located on the eastern portion of the property. Limited grading will take place to site proposed improvements and provide drainage slopes. Drainage easements along Kaneohe and Kawa Streams will be maintained. Excavation will be necessary for improvements to the screening facility. All renovations to the buildings will be designed and constructed to meet the City and County development standards.

A majority of the potable water line will be installed within the roadway along Kulauli Street and within the Kaneohe WWPTF property. The water line will have a minimum cover of three feet throughout its length and will be installed in sections (lengths to be determined by the construction contractor). Affected areas in the Wena and Kulauli Street Right-of-Way will be saw cut and excavated to approximately 6 to 8 feet below grade in order to install the water line.

All demolition work will take place within the eastern half of the property (see **Figure 4**). An Environmental Site Assessment is underway to identify hazardous materials and determine disposal sites. The Environmental Site Assessment consists of the following four (4) phases;

- Determine the location of hazardous materials
- Take soil sampling of the area
- Remove lead paint and asbestos prior to demolition
- Take additional soil sampling underneath the present location of the facilities following demolition

Any hazardous materials will be disposed of at permitted facilities.

The contractor will schedule work activity between the hours of 8:30 a.m. to 3:00 p.m., Monday through Friday, excluding any State holidays. During water line installation activities, at least one through-lane will be open during all periods of construction. Trenches for the proposed water line shall be covered during non-working hours with safe, non-skid bridging material to accommodate all types of vehicular traffic, and not more than the maximum permissible trenching length shall be exposed at any one time. In addition, the contractor shall provide ingress to and egress from driveways and public streets at all times. Should conditions warrant, the contractor may hire personnel to control the flow of traffic around the construction area.

The contractor shall perform all applicable construction work in accordance with the Board of Water Supply Water System Standards and the Standard Specifications for Public Works Construction " (September 1994) of the Department of Public Works (DPW), City and County of Honolulu, and the Revised Ordinances of Honolulu (ROH), 1978 as amended.

## SECTION 2 - Description of Project

Construction and restoration of the existing roadway shall be performed in accordance with all applicable sections of the "Standard Specifications for Road and Bridge Construction" (1994). All work shall also conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" and the "Manual of Uniform Traffic Control Devices for Street Maintenance Operation." Further, construction plans shall be submitted for review and approval by the City and County of Honolulu, Department of Transportation Services.

### 2.1.3 UTILITIES

**Electrical:** Electrical power to the facility is supplied by overhead primary service lines. A pad mounted transformer steps down primary power to 480/277V, 3 phase, 4 wire, grounded neutral secondary power. The facility is metered by Hawaiian Electric Company (HECO) at the entrance of the plant, however, the overhead line within the property and the transformer are owned and maintained by the City. The 480/277V service conductors carry secondary power to the switchboards and motor control centers.

In the event that commercial power is interrupted, the emergency engine generator will automatically start and essential loads will be automatically transferred over to emergency power.

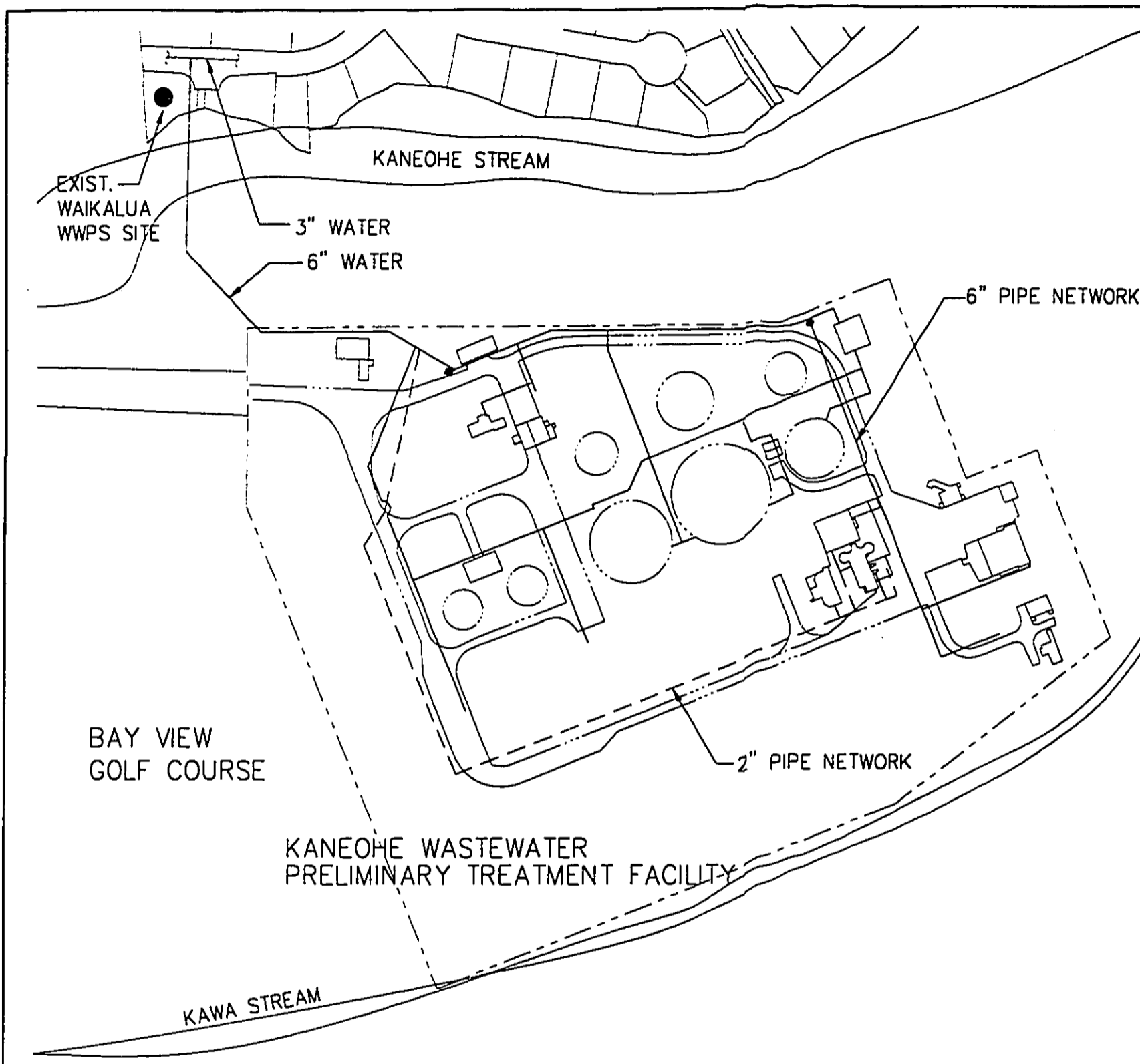
**Water System:** Water is currently provided to the Kaneohe WWPTF through a 6-inch pipe from the Waikalua Wastewater Pump Station (WWPS) site located across of Kaneohe Stream. The 6-inch pipe is connected to the Board of Water Supply (BWS) water system at a 3-inch water line on Holowai Place. The primary source of water for the area is the Kapunahala Reservoir.

The Kaneohe WWPTF on-site water system consists of a 6-inch pipe network and a 2-inch pipe network (Figure 7). The existing water supply system periodically does not meet pressure and/or flow requirements. In addition, the frequency of breakage has increased in the past year. The current system covers the area from Kapunahala Elementary School to Puohala Elementary School (see Figure 6). The project will include a water line system upgrade to meet the existing and future needs for potable water at the Kaneohe WWPTF. The proposed water line will extend approximately 4,000 lineal feet within the Right-of-Way (ROW) of Wena and Kulauli Street to the WWPTF. The new water system will be connected to the existing system at two points, existing fire hydrants on Wena and Kulauli Streets. The new water system will utilize the water network of the 272' System elevation, at the Kapunahala Reservoir.

### 2.1.4 SOLID WASTE

Screening and grit which are collected during normal operation of the WWPTF are disposed of at a landfill. Modification to the existing facilities will be phased such that facilities will remain in service. Solid waste generated during construction and demolition is to be disposed of by the contractor.

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**LEGEND**

- 6" PIPE NETWORK
- - - 2" PIPE NETWORK
- ⊙ FIRE HYDRANT

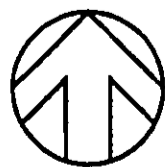


Figure 7  
KANEOHE WWPTF MODS PHASE IIIA  
**Existing Water System**  
ISLAND OF OAHU  
HAWAII

## SECTION 2 - Description of Project

### **2.1.5 LIQUID WASTE**

Liquid wastes of raw wastewater during normal operation of the Kaneohe WWPTF may occur as a spill condition. During normal operations, raw wastewater entering the facilities from the Kaneohe tributary area will receive preliminary treatment (screening and grit removal). Preliminary treated wastewater from Ahuimanu WWPTF is pumped to the Effluent Pump Station at the Kaneohe WWPTF. The combined flow is then pumped to the Kailua Regional WWTP which provides primary and secondary treatment.

The project will increase the pumping and storage capacity of the facility which will reduce the probability of wastewater spills. However, in the event of flows greater than the design peak flow, or total failure of the EPS, wastewater spills will be diverted to Kaneohe Stream. Any discharge to the surrounding area from the Kaneohe WWPTF will be a violation of the Clean Water Act, classified as a wastewater spill and reported to Department of Health (DOH) - Clean Water Branch. A number of provisions are planned to reduce the probability of wastewater spills. These include:

- Two wetwells are provided in the Influent Pump Station (IPS) and Effluent Pump Station (EPS). In the event of a problem in one wetwell, the second wetwell and pumps will be operational.
- Standby generators are provided in the event of Hawaiian Electric Company (HECO) power failure.
- In the event of total failure at the EPS for an extended time, a 10" portable self-priming pump with a capacity of 1950 gpm can take suction feed from the wetwell and discharge into the 42" force main through a valved connection.

### **2.2 ECONOMIC AND SOCIAL CHARACTERISTICS**

Construction work is tentatively scheduled for early 1999. Overall construction is estimated at eighteen (18) months. The estimated construction cost for Phase IIIA is approximately \$3,000,000.

### **2.3 ENVIRONMENTAL CHARACTERISTICS**

#### **2.3.1 TOPOGRAPHY**

The windward side of Oahu is generally characterized as steep cliffs of the Koolau mountain range which flatten to the coastal plains. The project site is situated on coastal plains, adjacent to Kaneohe Bay. The majority of the site is nearly flat and poorly drained. Topographic characteristics of the surrounding area has been modified for golf course use.

**Impacts:** Since the majority of the site has previously been modified for the construction and operation of the existing WWPTF, limited earthwork will be required to site grades and accommodate proposed facilities. To the extent possible, new facilities will be designed to minimize changes to the topography of the site. The proposed project will involve very limited clearing and grading due to relatively flat ground. Impacts on topographic features will be minimal.

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## SECTION 2 - Description of Project

### 2.3.2 SOILS

The project site and the vicinity were previously mapped by the U.S. Department of Agriculture Soil Conservation Service as a part of an overall soil survey of the Hawaiian islands. According to the Soil Survey, the entire site is covered with a single soil type, HnA - "Hanalei Silty Clay, 0 to 2 percent". The soil is strongly acid to very strongly acid in the surface layer and neutral in the subsoil. Permeability is moderate. Runoff is very slow, and erosion hazard is no more than slight. This soil is used for taro, pasture, and sugarcane.

**Impacts:** The proposed project will involve very limited clearing and grading due to the relatively flat ground. During construction, clearing and grading will temporarily disturb the soils by subjecting them to erosion forces. This impact will be short-term. A drainage system of swales and erosion control programming will be utilized on site to minimize erosion potential over disturbed areas during construction. Drainage easements will be maintained along Kaneohe and Kawa Streams to prevent stream bank erosion. Pile driving will be necessary to support new structures (e.g. EPS force main header) due to the soil instability.

### 2.3.3 HYDROLOGY

Kaneohe Bay is located to the northeast of the property. Kaneohe and Kawa Streams wind through the Kaneohe coastal plain and pass a small fish pond before emptying into the sediment-laden waters of Kaneohe Bay. Kaneohe and Kawa Streams bisect the Bay View Golf Course and pass north and south of the Kaneohe WWPTF, respectively. According to the Flood Insurance Rate Map, the project is located in the area within Zone AE and Zone X (Figure 8). A narrow strip along Kawa Stream is indicated as floodway. The project site include small portions of the floodway along Kawa Stream. Zone AE indicates "special flood hazard areas inundated by 100-year flood, base flood elevation is determined." The areas identified as Zone X are described as "areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot."

**Impacts:** The general drainage patterns of the site will remain similar to the existing conditions since most of the construction will be modifications to existing facilities. The development of the project will be in compliance with the requirements of Federal Flood Insurance Program, the City and County of Honolulu Drainage Standards, Grading Ordinance, and Development Standards for DLU Flood Hazards District.



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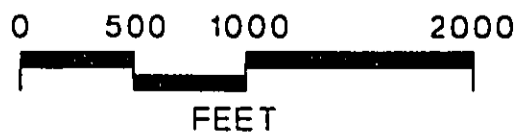
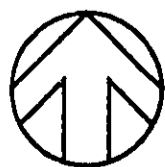
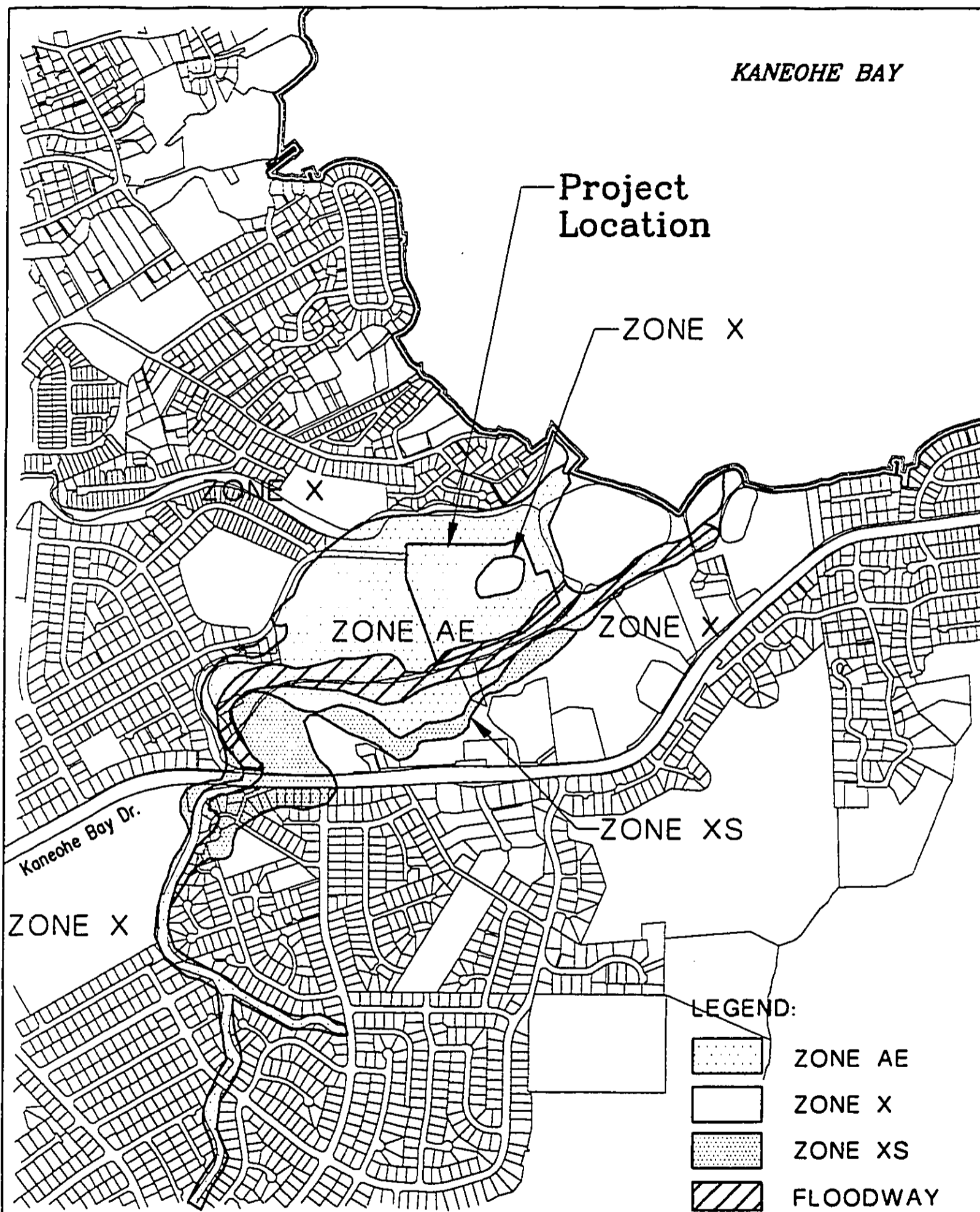


Figure 8  
Kaneohe WWPTF MODS PHASE IIIA  
**FIRM (FEMA)**  
ISLAND OF OAHU  
HAWAII

## SECTION 2 - Description of Project

### 2.3.4 WETLANDS

Kawa Stream winds through the Kaneohe coastal plain and passes a small fish pond before emptying into Kaneohe Bay. Near the outlet of Kawa Stream and along the fishpond is a small but thriving mangrove swamp. Further upstream is another wetland. This is a freshwater marsh type wetland and lies adjacent to the golf course and opposite the Kaneohe WWPTF.

The wetlands and the entire coastline and coastal waters are considered environmentally sensitive. These environmentally sensitive areas are all within the SMA boundary and, as such, are subject to special Coastal Zone Management (CZM) regulations under State statute administered by the City and County of Honolulu. The SMA boundary in relation to the project site is shown in **Figure 2**.

**Impacts:** The project will maintain the general drainage patterns of the area, including drainage easements along Kaneohe and Kawa Streams. The project is not anticipated to have significant effects on the surrounding wetland areas.

### 2.3.5 CLIMATE AND AIR QUALITY

Mild and uniform temperatures prevail with a dominance of cool northeast tradewinds. The mean annual temperature is about 75 degrees Fahrenheit. The extreme temperatures range from 58 to 90 degrees Fahrenheit during the coolest and warmest months. The average annual precipitation of the area is approximately 50 inches of rain (State of Hawaii Data Book, 1990; A Statistical Abstract). Heavy rains often occur during November through April with only about 30 percent of the annual rainfall occurring from May through October.

The present ambient air quality in the area is good due to the prevailing tradewinds and the absence of "heavy" industries. Traffic passing through this part of the windward Oahu coast is the primary source of emissions.

**Impacts:** The principal source of short term air quality impacts will be from construction activities. The necessary air pollution permits will be obtained from the State Department of Health (DOH) prior to the start of construction. Dust control practices will be required to be implemented as necessary, and will comply with the State DOH Regulations, Chapter 60, Air Pollution Control.

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## SECTION 3 Affected Environment

### 3.1 EXISTING LAND USES

The Kaneohe area is characterized as a predominantly residential community. In recent years, an increased demand for housing by Honolulu, Pearl Harbor, and Kaneohe Marine Base Headquarters (KMBH) employees has stimulated the expansion of housing development of the area.

The project is located on TMK 4-5-30:36 and under the jurisdiction of the City & County of Honolulu. The property contains approximately sixteen (16) acres of land, currently used as a wastewater preliminary treatment facility. The surrounding area has been intensively urbanized. The immediate surrounding area is Bay View Golf Course. The golf course is bordered by the various residential developments.

**Impacts:** No adverse effects are anticipated as a result of the proposed project. The proposed modifications of the Kaneohe WWPTF are necessary to ensure operational safety and proper maintenance of the existing facility. All work will be conducted within the property. No additional land will need to be acquired.

### 3.2 FLORA AND FAUNA

Landscaping and residential areas are the predominant botanical features in the Kaneohe area. Natural vegetation at lower elevations include pili grass, kiawe, haole koa, and finger grasses. There are, at higher elevations, guava, Christmas berry, California grass, java plum and lantana. Coconut trees, Bermuda grass, and a variety of grasses and weeds are features on and adjacent to Kaneohe WWPTF.

Wild animal life within the Kaneohe area includes mongoose, rat, wild pig, and feral cats and dogs. The open waterways are nearly always eutrophic and are dominated by exotic warm water species such as tilapia and mosquitofish. The coastal regions include natural habitats and feeding areas for many introduced exotic birds such as cardinals, linnets, sparrows, mynah birds, thrush, and doves. Native herons frequent and feed in the fish ponds of Moli, Kahaluu and Heeia. The Hawaiian Owl, Pueo, is generally found in open grassland areas. The State of Hawaii lists this species as endangered on Oahu. The marshy wetlands along the shoreline, near the mouths of streams and fish ponds, are the natural habitat for endangered species of waterbirds.

**Impacts:** The project site was intensively developed for the Kaneohe WWPTF. The surrounding area has been modified for a golf course. Limited grading will take place for site proposed improvements and drainage slopes will be provided.

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## SECTION 3 - Affected Environment

Except for the short-term disturbance during construction, the project is not anticipated to cause adverse impacts on the area's botanical or wildlife resources.

### **3.3 NOISE**

Noise generated from the refurbished pump station will comply with the State Department of Health Regulations, Chapter 43, "Community Noise Control for Oahu." Chapter 43 limits noise levels along the property boundary lines to 55 dBA during the day and 45 dBA at night.

**Impacts:** Short term noise impacts are primarily related to construction. Noise generated by construction activities will be mitigated to some degree by requiring contractors to adhere to State and County noise regulations. This includes ensuring that machinery is properly muffled and maintained. In addition, specific start and curfew times will be established for construction activities.

Long term noise impacts on the area surrounding the Kaneohe WWPTF would generally be caused by the refurbished wastewater pumps. Mitigative measures for the wastewater pumps include small shelters over motors to protect them from the environment. Due to a 600-foot buffer space, the noise levels within the community to the north are under the 45 dBA limits.

### **3.4 SCENIC AND VISUAL RESOURCES**

Windward Oahu presents steep cliffs and valleys transient into flat coastal plains in a relatively short distance, which creates a series of magnificent views and high aesthetic value. The property is located on the low-lying land adjacent to Kaneohe Bay. Kaneohe Bay is one of the distinguished coastal viewsheds of Oahu. The surrounding area is mostly developed with golf course and residential uses. The project is located between Kaneohe Bay and Kaneohe Bay Drive. Makai views from Kaneohe Bay Drive are intermittent due to residential lots and vegetation coverage.

**Impacts:** The architectural and landscaping features of the proposed facilities and modifications will be chosen to minimize visual impacts of the area.

### **3.5 WATER QUALITY**

Kaneohe Bay has the highest water quality classification, Class AA. The Bay consists of two major circulation system patterns. The northern portion of the bay has high circulation rates and short residence times. The southern portion of the bay has lower circulation rates and longer residence times. The water quality is poorer in the southern portion as would be expected with the lower circulation rates.

**Impacts:** The project is not anticipated to have significant impacts on the water quality of Kaneohe Bay. The project is located approximately 1,000 feet away from the Bay. The project will maintain the drainage easements along Kaneohe and Kawa Streams. The pumping capacity of the facility will be increased, which will consequently reduce the potential risk of wastewater spills.

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## SECTION 3 - Affected Environment

### **3.6 TRAFFIC AND TRANSPORTATION SYSTEM**

The Kaneohe WWPTF can be accessed via Kaneohe Bay Drive, Puohala Street, and Kulauli Street. Kulauli Street provides direct access to the facility. Construction of the proposed water line will have an impact on traffic entering and leaving the Kaneohe WWPTF. Residential traffic along Wena and Kulauli Streets will also be affected.

**Impacts:** Some traffic congestion is expected once construction work begins. To minimize traffic impacts, the contractor will schedule work activity between the hours of 8:30 a.m. and 3:00 p.m., Monday through Friday, excluding any State holidays. During construction, at least one through-lane will be open to traffic. Should conditions warrant, the contractor may hire personnel to control the flow of traffic around the construction area. During non-working hours, all trenches will be covered with a safe non-skid bridging material and all lanes will be open to traffic. The contractor shall provide ingress to and egress from driveways and public streets at all times.

The construction activity will be in conformance with the "Hawaii Administrative Rules governing the Use of Traffic Control Devices at Work Sites on or adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration's "Manual on Uniform Traffic Controls for Streets and Highways, Part VI". Upon completion of the project, no significant impacts on the traffic system is anticipated to result from this project.

### **3.7 HISTORIC/ARCHAEOLOGICAL RESOURCES**

According to the State Historic Preservation Office, the project site is not likely to contain any historical or archaeological features. The bulk of the project area has been previously disturbed for construction of the existing Kaneohe WWPTF facilities.

Although impacts to archaeological resources are not expected, if any unidentified cultural remains are uncovered during the course of the project, work in the immediate area will cease and the appropriate government agencies will be contacted for further instructions.

### **3.8 RECREATIONAL FACILITIES**

The 18-hole Bay View Golf Course is located adjacent to the project while Puohala Elementary School is located nearby. Since the project will take place within the existing WWPTF boundary, construction activity at the site will not interfere with either facility. Construction operations, however will temporarily increase traffic on the access road which crosses a portion of the golf course and passes the elementary school. Traffic control measures will be necessary to mitigate the effects of the increased traffic during the transportation of equipment and material to and from the site. The contractor will be required to maintain safe access for the golfers of Bay View Golf Course and the children at the school nearby.

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## **SECTION 4**

### **Mitigation Measures**

#### **4.1 POTENTIAL SHORT-TERM IMPACTS AND MITIGATION**

The project will generate short-term adverse impacts due to construction activities. The following is a discussion of potential short-term impacts and mitigation measures to minimize potential adverse effects.

- Grading and grubbing will disturb the soil and cause some erosion. Adequate erosion control measures such as silt screens or sand bags will be provided to prevent silt and other undesirable materials from entering the streams and wetlands. Prior to any construction, an Erosion Control Plan must be approved by the City and County of Honolulu, Department of Public Works.
- Construction operations will temporarily generate increased noise levels. Noise generated from construction activities will be mitigated to some degree by requiring the contractor to adhere to State of Hawaii DOH regulations and the City and County of Honolulu Noise Ordinance, which limits construction operations and resultant noise to daytime hours and specific maximum levels.
- Construction activities will temporarily impact the area's air quality in the form of fugitive dust and emissions from construction equipment and vehicles. Fugitive dust emission will be reduced by following State DOH Rules and Regulations (Chapter 43, Section 10) which specifies the control measures. This type of emission will be controlled by frequent watering of the construction site. Another measure is to maintain equipment in proper working order.
- The access road to the facility from Kulauli crosses a portion of the Bay View Golf Course. Construction operations will temporarily increase traffic on the access road. Traffic control measures will be provided to mitigate the effects of increased traffic.
- Construction dewatering and hydrotesting water is likely to ultimately be disposed of to State waters. As a result, the dewatering and hydrotesting water disposal will require a State Department of Health, National Pollution Discharge Elimination System (NPDES) General Permit or Individual Permit prior to the commencement of construction.

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## SECTION 4 - Mitigation Measures

### 4.2 POTENTIAL LONG-TERM IMPACTS AND MITIGATION

The proposed project will require some alteration of the land. Limited grading will take place to locate proposed improvements and provide drainage slopes. However, drainage easements and buffers will be maintained along Kaneohe and Kawa Streams.

All demolition works will take place within the eastern half of the property. An Environmental Site Assessment is underway to identify hazardous materials and determine disposal sites as described in Section 2.1.2 of this document. Any hazardous materials will be disposed of at permitted facilities.

The Kaneohe WWPTF modification, when completed, will provide upgraded facilities. The pumping capacity of the facility will be increased by the project, which will reduce the potential risk of a wastewater spill.

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**SECTION 5 - Relationship to State & County Land  
Use Plans and Policies**

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**SECTION 5  
Relationship to State and County Land  
Use Plans and Policies**

**5.1 THE HAWAII STATE PLAN**

The Hawaii State Plan, Chapter 226, Hawaii Revised Statutes, serves as a written guide for the future long range development of the State. The Plan identifies statewide goals, objectives, policies, and priorities.

The proposed project would be in conformance with the State Plan's objectives and policies for facility systems. According to Section 226-14 objectives and policies for facility systems-in general and Section 226-15 objectives and policies for facility systems-solid and liquid wastes, the following policies would apply to the proposed project:

§226-14 Objectives and policies for facility systems-in general:

(a) Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

§226-15 Objectives and policies for facility systems-solid and liquid wastes:

(a)(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.

(2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.

**5.2 STATE LAND USE LAW**

The project site lies within the state land use category "urban".

**5.3 CITY AND COUNTY ZONING**

The City and County of Honolulu zoning is I-2 "Intensive Industrial" and P-2 "General Preservation" (see Figure 3). Most demolition work will take place at I-2 zoned areas. According to the Department of Land Utilization, based on Section 5 of Land Use Ordinance (LUO), development of I-2 and P-2 zoned lands for public uses and structures, such as this project, is exempt from the permit reviewing process.



**SECTION 5 - Relationship to State & County Land Use Plans and Policies**

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**5.4 CITY AND COUNTY GENERAL PLAN & DEVELOPMENT PLAN**

The General Plan identifies the long-range planning goals and objectives which the City and County of Honolulu attempts to accomplish in the interest of Oahu residents. The proposed project is in conformance with the General Plan's objectives and policies for Transportation and Utilities:

- Objective B: To meet the needs of the people of Oahu for an adequate supply of water and for environmentally sound systems of waste disposal.
- Policy 5: Provide safe, efficient, and environmentally sensitive waste-collection and waste-disposal services.
- Policy 6: Support programs to recover resources from solid-waste and recycle wastewater.

The Development Plan Land Use Designation is Public, Quasi-Public, and Park/Golf Course.

**5.5 SPECIAL MANAGEMENT AREA (SMA) RULES AND REGULATIONS**

The City and County of Honolulu has designated the shoreline and certain inland areas of Oahu as being within the special management area (SMA). SMA areas are defined as sensitive environments that should be protected in accordance with the State's coastal zone management policies. The SMA use permit was granted in 1988, for Phase II of the development. The proposed development is Phase IIIA of the on-going Kaneohe WWPTF modification project, and covered under the same SMA granted for the project in 1988.

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## **SECTION 6**

### **Alternatives to the Proposed Action**

#### **6.1 THE "NO" ACTION ALTERNATIVE**

The Kaneohe WWPTF was initially constructed as a secondary wastewater treatment facility. A number of the original facilities originally built for secondary treatment uses are currently utilized as temporary wastewater storage facilities. The primary objective of this project is to minimize the risk of wastewater spills by replacing aging equipment and increasing pumping capacity. The "no action" alternative would retain the Kaneohe WWPTF with a higher potential risk of wastewater spills.

#### **6.2 ALTERNATIVE SITE**

The purpose of this project is to upgrade the existing Kaneohe WWPTF to minimize the risk of wastewater spills and improve operational safety and aesthetics of the site. The proposed project will not require acquisition of any additional land. All work will be performed within the present property boundary. Therefore, no alternative site need be considered.

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**SECTION 7 - Relationship between Local Short-Term Uses of Man's Environment & the Maintenance & Enhancement of Long-Term Productivity**

**SECTION 7**

**Relationship between Local Short-Term Uses of Man's Environmental and the Maintenance and Enhancement of Long-Term Productivity**

No short-term exploitation of resources resulting from the redevelopment of the site for the Kaneohe WWPTF modifications will have long-term adverse consequences. The WWPTF is currently in operation as a wastewater preliminary treatment facility. The surrounding property is modified to develop the Bay View Golf Course.

The architectural and landscaping features of the proposed modifications will be chosen to minimize visual impacts of the area.

Long-term gains resulting from development of the proposed project include the provision of more efficient uses of the existing facility. The project will increase pumping capacity of the facility, which will subsequently reduce the potential risk of a wastewater spill.

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***SECTION 8 - Irreversible/Irretrievable Commitment of  
Resources by the Proposed Action***

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**SECTION 8  
Irreversible/Irretrievable Commitment of  
Resources by the Proposed Action**

Development of the proposed project will involve the irretrievable loss of certain environmental and financial resources. However, the costs associated with the use of these resources should be evaluated in light of recurring benefits through increased efficiency and safety of the wastewater treatment facility.

It is anticipated that the construction of the proposed project will commit the necessary construction materials and human resources (in the form of planning, designing, engineering, construction and labor). Reuse for much of these materials and resources is not practical, and labor expended for project development is not retrievable.

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## **SECTION 9 Determination**

The potential effects of the proposed project are evaluated based on the significance criteria in section 11-200-12 (Hawaii Administrative Rules, revised in 1996). The following is a summary of the potential effects of the action.

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

Development of the project will involve the irrevocable loss of certain environmental resources. However, the costs associated with the use of these resources should be evaluated in light of recurring benefits through increased operational capacity and safety by the proposed modifications of the WWPTF.

- (2) **Curtails the range of beneficial uses of the environment:**

The project will not curtail the range of beneficial uses of the environment. The surrounding property is used for a golf course. The project will not interfere with this recreational facility except for the short-term impacts from increased noise and traffic due to the construction activity.

- (3) **Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, HRS:**

The project would be in conformance to the Chapter 344, HRS, State Environmental Policy. The project will increase safety and aesthetics of the existing wastewater treatment facility.

- (4) **Substantially affects the economic or social welfare of the community or State:**

The proposed modification of the WWPTF is not anticipated to have significant effects on the area's economic activities or social welfare of the community or

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**SECTION 9 - Determination**

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state.

**(5) Substantially affects public health:**

The primary objective of this project is to minimize the risk of wastewater spills by replacing aging equipment and increasing pumping capacity. The proposed project is not anticipated to have substantial effects on public health. Drainage easements and stream buffers will be maintained along Kaneohe and Kawa Streams. A number of provisions will be provided to reduce the probability of wastewater spills as described in Section 2.1.5. The project is not anticipated to have significant effects on the water quality of streams, wetlands and the bay.

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

The project is not anticipated to result in substantial secondary impacts, such as population changes or effects on public facilities.

**(7) Involves a substantial degradation of environmental quality:**

The proposed project is not anticipated to involve a substantial degradation of environmental quality. The project requires a very minimum clearing and grubbing. In addition, the site has been disturbed for the construction and operation of the existing facilities, and the surrounding area has been highly modified.

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

The project is not anticipated to result in cumulative effects; therefore, it would not involve a commitment to larger actions.

**(9) Substantially affects a rare, threatened, or endangered species, or its habitat:**

The proposed project is not anticipated to have substantial effects on rare, threatened, or endangered species, or their habitats. Since the area has been

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**SECTION 9 - Determination**

modified long ago, it is not likely to encounter any rare, threatened, or endangered species.

**(10) Detrimentially affects air or water quality or ambient noise levels:**

The project is not anticipated to result in significant effects on the area's long-term air or water quality or ambient noise levels.

**(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:**

The project site is situated in a plain that has been subject to flooding and is within the SMA. However, the project will not alter existing drainage patterns or shoreline configurations.

**(12) Substantially affects scenic vistas and viewplanes identified in county or states plans or studies:**

The Kaneohe WWPTF modification will not significantly affect the area's visual resources. All facilities and modifications will be designed and constructed in compliance with City and County development standards. The architectural and landscaping features of the proposed facilities will be chosen to minimize visual impacts on the area.

**(13) Requires substantial energy consumption:**

The project is not anticipated to result in substantial energy consumption.

In accordance with the provisions set forth in Chapter 343, Hawaii Revised Statutes, this Environmental Assessment has determined that the project will not have significant adverse impacts to water quality, air quality, existing utilities, noise, archaeological sites, or wildlife habitat. Therefore, it is recommended that an Environmental Impact Statement (EIS) not be required and a Finding of No Significant Impact (FONSI) be issued for this project.

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SECTION 10 - Necessary Permits and Approvals

## **SECTION 10**

### **Necessary Permits and Approvals**

#### **10.1 CITY AND COUNTY OF HONOLULU**

The following City and County Permits are required:

- *Building Permit*
- *Combustible and Flammable Liquids Tank Installation Permit (Article 79 of the Fire Code of the City and County of Honolulu)*
- *Grading, Grubbing, Excavating and Stockpiling Permits*
- *Street Usage Permit*

The following approvals are required by the City and County of Honolulu:

- *Flood Determination in General Flood Plain District*
- *Board of Water Supply*
- *Department of Design and Construction*
- *Department of Planning and Permitting*

#### **10.2 STATE**

The following permits are required by the State:

- *NPDES Permit for Construction Related Discharges - State Department of Health (Chapter 55)*

The following approvals are required by the State:

- *Archaeological Review - State Department of Land and Natural Resources, Historic Preservation Division*
- *Community Noise Control - State Department of Health (Chapter 43)*
- *Wastewater Systems - State Department of Health (Chapter 62)*
- *Commission on Persons With Disabilities*

#### **10.3 FEDERAL**

No Federal permits are required for the proposed action.



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**SECTION 10 - Necessary Permits and Approvals**

**10.4 UTILITY COMPANIES**

Construction plans will be reviewed by the following utility companies:

- Gasco
- Hawaiian Electric Company
- Hawaiian Telephone Company
- Oceanic Cablevision

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**SECTION 11 - Agencies Consulted and Participants in the  
Preparation of the Draft Environmental Assessment**

**SECTION 11  
Agencies Consulted and Participants in the  
Preparation of the Draft Environmental  
Assessment**

**11.1 FEDERAL AGENCIES**

Department of the Army, U.S. Army Engineer District, Honolulu

**11.2 STATE AGENCIES**

Department of Transportation

Department of Land and Natural Resources, Historic Preservation Division

Department of Business, Economic Development & Tourism, Office of Planning

**11.3 CITY & COUNTY OF HONOLULU**

Board of Water Supply

Department of Parks and Recreation

Department of Planning and Permitting

Department of Transportation Services

Police Department

**11.4 PRIVATE ORGANIZATION/INDIVIDUAL**

Bayview Golf Course

GTE Hawaiian Tel

Kailua Neighborhood Board

Kaneohe Neighborhood Board

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***REFERENCES***

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## REFERENCES

- Atlas of Hawaii, Second Edition.* Department of Geography, University of Hawaii, 1983.
- Coastal View Study,* Michael S. Chu and Robert B. Jones, 1987, City & County of Honolulu, Department of Land Utilization
- Environmental Assessment for the Kaalaea Wastewater Pump Station and Force Main, Kaalaea, Kaneohe, Hawaii,* R.M. Towill Corporation, October 1993.
- Environmental Impact Statement for the Kahaluu Wastewater Treatment and Disposal System, Koolaupoko, Oahu, Hawaii, Tax Map Key: 4-6, 7, 8, 9,* R. M. Towill Corporation, January 1980.
- General Plan, Objectives and Policies,* Department of General Planning, City and County of Honolulu, 1992.
- Hawaii Stream Assessment: A Preliminary Appraisal of Hawaii's Stream Resources,* State of Hawaii, Commission on Water Resource Management, In cooperation with the National Park Service, Rivers and Trails Conservation Assistance Program, December 1990.
- Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii,* United States Department of Agriculture, Soil Conservation Service in cooperation with the University of Hawaii Agricultural Experiment Station, August 1972.
- The State of Hawaii Data Book 1993-1994; A Statistical Abstract.* Department of Business, Economic Development and Tourism, State of Hawaii, 1994.
- Wetlands and Wetland Vegetation of Hawaii,* Margaret E. Elliott and Erin Marie Hall, September 1977.

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## ***APPENDICES***

*Comments to the Draft Environmental Assessment Appendix A*

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DEPARTMENT OF PLANNING AND PERMITTING

**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813  
Phone: (808) 523-4414 • Fax: (808) 527-6743

DESIGN & CONSTR  
C & C OF HONOLULU

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EREMY HARRIS  
MAYOR



July 7, 1998

98-DC-19

JAN NAOE SULLIVAN  
DIRECTOR

LORETTA K.C. CHEE  
DEPUTY DIRECTOR

98-04350 (ASK)

88/SMA-112

'98 EA Comments Zone 4

MEMORANDUM

TO: RANDALL K. FUJIKI, DIRECTOR  
DEPARTMENT OF DESIGN AND CONSTRUCTION

ATTN: STEPHANIE DODGE

FROM: JAN NAOE SULLIVAN, DIRECTOR  
DEPARTMENT OF PLANNING AND PERMITTING

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT AND SPECIAL MANAGEMENT  
AREA REQUIREMENTS FOR KANEOHE WASTEWATER PRELIMINARY  
TREATMENT FACILITY (WWPTF) MODIFICATIONS PHASE IIIA  
TAX MAP KEY: 4-5-30; 36

We have reviewed the Draft Environmental Assessment (EA) for the above project and find that the proposed modifications are generally consistent with a previously approved Special Management Area Use Permit (88/SMA-112), City Council Resolution No. 89-24. As such, permit requirements have been satisfied.

Proposed modifications and improvements to the existing Kaneohe WWPTF are identified in Table 1 of the Draft EA and include the following:

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RANDALL K. FUJIKI, DIRECTOR  
 Page 2  
 July 7, 1998

Table I KANEHOE WWPTF MODIFICATIONS PHASE IIIA		
EXISTING FACILITIES TO BE REFURBISHED	IMPROVEMENTS	DESCRIPTION
	Influent Pump Station and Screening Facility	<ul style="list-style-type: none"> <li>• Increase pump capacity from 20 mgd to 25 mgd</li> <li>• Replace existing bar screens and add bypass screening channel</li> </ul>
	Effluent Pump Station	<ul style="list-style-type: none"> <li>• Increase pump capacity from 23 mgd to 26 mgd</li> <li>• New pump station parallel header piping</li> <li>• New venturi meter</li> <li>• Add 150 gallon diesel fuel day-tank</li> </ul>
	Diesel Fuel Tank	<ul style="list-style-type: none"> <li>• Replace existing fuel tank to 5,200 gallon aboveground steel tank with leak detection</li> <li>• Double-wall FRP piping with leak detection</li> </ul>
	Site Work	<ul style="list-style-type: none"> <li>• Re-route portions of various lines as needed</li> </ul>
NEW FACILITIES/ CONSTRUCT.	Potable Water line	<ul style="list-style-type: none"> <li>• New water supply line from outside of plant and looping within</li> </ul>
	Trailer Pad for Portable Emergency Generator	<ul style="list-style-type: none"> <li>• Trailer pad for portable emergency generator to be located near existing EPS</li> </ul>

Figure 5 of the Draft EA shows the location of the proposed modifications within the project site.

On March 22, 1989, the Honolulu City Council approved a Special Management Area Use Permit (SMP) for conversion of the Kaneohe Wastewater Treatment Plant to a pretreatment pump station. Condition C of Resolution No. 89-24 authorizes issuance of construction permits for work substantially consistent with plans on file with our department.

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RANDALL K. FUJIKI, DIRECTOR

Page 3

July 7, 1998

Should you have any questions regarding the above, please contact Ardis Shaw-Kim of our staff at Extension 5349.



JAN NAOE SULLIVAN  
Director of Planning  
and Permitting

JNS:am

cc: R.M. Towill Corporation

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**CITY COUNCIL**  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

No. 89 - 24

**RESOLUTION**

Granting a Special Management Area Use Permit to  
Convert the Existing Kaneohe Wastewater Treatment  
Plant to a Pretreatment Plant and Pump Station

WHEREAS, the Department of Land Utilization (DLU) on November 16, 1988, accepted the application of the Department of Public Works, herein referred to as the APPLICANT, for a Special Management Area Use Permit (SMP) to convert the existing Kaneohe Wastewater Treatment Plant to a pretreatment plant and pump station, including demolition of the secondary treatment equipment, construction of new headworks and odor control buildings, relocation of utility lines and the access road, and other improvements located at 45-230 Kulauli Street, in Kaneohe, Oahu, and identified as Tax Map Key 4-5-030: 36; Reference Number 88/SMA-112; and

WHEREAS, on December 28, 1988, the DLU held a public hearing which was attended by nine people; and

WHEREAS, on January 12, 1989, within ten (10) working days after the close of the public hearing, the DLU, having duly considered all evidence and reports of said public hearing and the review guidelines as established in Sections 33-3.1 and 33-3.2, Revised Ordinances of Honolulu, completed its report and transmitted its findings and recommendation of approval to the Council; and

DEPT OF LAND UTILIZATION  
HONOLULU  
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**CITY COUNCIL**  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

No. 89-24

## RESOLUTION

WHEREAS, the City Council having received the findings and recommendation of DLU on January 12, 1989, and at its meeting of March 14, 1989, having duly considered all of the findings and reports on the matter, approved the subject application for an SMP with the conditions enumerated below; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that a SMP be issued to the APPLICANT under the following conditions:

- A. Prior to implementation of the project, the applicant must meet the requirements and obtain approval of all government agencies normally required for such projects.
- B. If, during construction, any previously unidentified sites or remains (such as artifacts, shell, bone, or charcoal deposits, human burials, rock or coral alignments, pavings, or walls) are encountered, the applicant shall stop work and contact the State DLNR Historic Sites Office at 548-7460 immediately. Work in the immediate area shall be stopped until the office is able to assess the impact and make further recommendations for mitigative activity.
- C. Construction permits shall be issued for plans which are substantially consistent with plans approved under this application (DLU file plans time-stamped October 17, 1988). Any change in the size or nature of the project which has a significant effect on coastal resources addressed in Chapter 33, ROH, shall require a new application. Any change which does not have a significant effect on coastal resources shall be considered a minor modification and therefore permitted under this resolution, upon review and approval of the Director of Land Utilization.

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# RESOLUTION

BE IT FINALLY RESOLVED by the Council of the City and County of Honolulu that the Clerk be, and he is, hereby directed to transmit copies of this resolution to Mr. John P. Whalen, Director of Land Utilization; Mr. Herbert K. Muraoka, Director and Building Superintendent, Building Department; Mr. William W. Paty, State Department of Land and Natural Resources, Historic Preservation Office, P. O. Box 621, Honolulu, Hawaii 96809; Mr. Sam Callejo, Director and Chief Engineer, Department of Public Works, and R.M. Towill Corporation, 420 Waiakamilo Road, #411, Honolulu, Hawaii 96817-4921.

INTRODUCED BY:

*[Handwritten Signature]* (BR)

DATE OF INTRODUCTION:

JAN 19 1989

Honolulu, Hawaii

Councilmembers

-3-

## CITY COUNCIL

CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

*[Signature]*  
RAYMOND K. PUA  
CITY CLERK

*[Signature]*  
ARNOLD MORGADO, JR.  
CHAIR AND PRESIDING OFFICER

Dated MAR 22 1989

ADOPTED MEETING HELD		
MAR 22 1989		
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Reference: D 29

Report No. ZCR-168

Resolution No.  
89 - 24

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DOCUMENT CAPTURED AS RECEIVED

AUG-13-1998 09:35 FROM WASTEWATER MGMT P&SC/E&C TO R M T C P.01

CITY COUNCIL  
CITY AND COUNTY OF HONOLULU  
HONOLULU HAWAII

No. 89-24

RESOLUTION

Granting a Special Management Area Use Permit to Convert the Existing Kaneohe Wastewater Treatment Plant to a Pretreatment Plant and Pump Station

WHEREAS, the Department of Land Utilization (DLU) on November 16, 1988, accepted the application of the Department of Public Works herein referred to as the APPLICANT, for a Special Management Area Use Permit (SMA) to convert the existing Kaneohe Wastewater Treatment Plant to a pretreatment plant and pump station, including demolition of the secondary treatment equipment, construction of new headworks and odor control buildings, relocation of utility lines and the access road, and other improvements located at 45-230 Kulauli Street, in Kaneohe, Oahu, and identified as Tax Map Key 4-5-030-36; Reference Number 88/SMA-112; and

WHEREAS, on December 28, 1988, the DLU held a public hearing which was attended by nine people; and

WHEREAS, on January 12, 1989, within ten (10) working days after the close of the public hearing, the DLU, having duly considered all evidence and reports of said public hearing and the review guidelines as established in Sections 33-3.1 and 33-3.2, Revised Ordinances of Honolulu, completed its report and transmitted its findings and recommendation of approval to the Council; and

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DEPT OF LAND UTILIZATION  
HONOLULU

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# CORRECTION

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

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DOCUMENT CAPTURED AS RECEIVED

AUG-13-1998 09:35 FROM WASTEWATER MGMT P&SC/E&C TO

R M T C P.01

CITY COUNCIL  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

No. 89-24

RESOLUTION

Granting a Special Management Area Use Permit to  
Convert the Existing Kaneohe Wastewater Treatment  
Plant to a Pretreatment Plant and Pump Station

WHEREAS, the Department of Land Utilization (DLU) on November 16, 1988, accepted the application of the Department of Public Works, herein referred to as the APPLICANT, for a Special Management Area Use Permit (SMP) to convert the existing Kaneohe Wastewater Treatment Plant to a pretreatment plant and pump station, including demolition of the secondary treatment equipment, construction of new headworks and odor control buildings, relocation of utility lines and the access road, and other improvements located at 45-230 Kulauli Street, in Kaneohe, Oahu, and identified as Tax Map Key 4-5-030-36; Reference Number 88/SMA-112; and

WHEREAS, on December 28, 1988, the DLU held a public hearing which was attended by nine people; and

WHEREAS, on January 12, 1989, within ten (10) working days after the close of the public hearing, the DLU, having duly considered all evidence and reports of said public hearing and the review guidelines as established in Sections 33-3.1 and 33-3.2, Revised Ordinances of Honolulu, completed its report and transmitted its findings and recommendation of approval to the Council; and

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DEPT OF LAND UTILIZATION  
HONOLULU



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AUG-13-1998 09:36 FROM WASTEWATER MGMT P2SC/E3C TO

R M T C P.02

**CITY COUNCIL**  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

No. 89-24

**RESOLUTION**

WHEREAS, the City Council having received the findings and recommendation of DLU on January 12, 1989, and at its meeting of March 14, 1989, having duly considered all of the findings and reports on the matter, approved the subject application for an SMP with the conditions enumerated below; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that a SMP be issued to the APPLICANT under the following conditions:

- A. Prior to implementation of the project, the applicant must meet the requirements and obtain approval of all government agencies normally required for such projects.
- B. If, during construction, any previously unidentified sites or remains (such as artifacts, shell, bone, or charcoal deposits, human burials, rock or coral alignments, pavings, or walls) are encountered, the applicant shall stop work and contact the State DLNR Historic Sites Office at 548-7460 immediately. Work in the immediate area shall be stopped until the office is able to assess the impact and make further recommendations for mitigative activity.
- C. Construction permits shall be issued for plans which are substantially consistent with plans approved under this application (DLU file plans time-stamped October 17, 1988). Any change in the size or nature of the project which has a significant effect on coastal resources addressed in Chapter 33, ROH, shall require a new application. Any change which does not have a significant effect on coastal resources shall be considered a minor modification and therefore permitted under this resolution, upon review and approval of the Director of Land Utilization.



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AUG-13-1998 09:37 FROM WASTEWATER MGMT P2SC/E2C TO R M T C P.03

RESOLUTION

BE IT FINALLY RESOLVED by the Council of the City and County of Honolulu that the Clerk be, and he is, hereby directed to transmit copies of this resolution to Mr. John P. Whalen, Director of Land Utilization; Mr. Herbert K. Muraoka, Director and Building Superintendent, Building Department; Mr. William W. Paly, State Department of Land and Natural Resources, Historic Preservation Office, P. O. Box 621, Honolulu, Hawaii 96809; Mr. Sam Callejo, Director and Chief Engineer, Department of Public Works, and R.M. Towill Corporation, 420 Waiakamilo Road, #411, Honolulu, Hawaii 96817-4921.

INTRODUCED BY:

*[Handwritten Signature]* (BR)

DATE OF INTRODUCTION:

JAN 19 1989

Honolulu, Hawaii

Councilmembers

-3-

CITY COUNCIL  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

*[Handwritten Signature]*  
RAYMOND K. PUA  
CITY CLERK

*[Handwritten Signature]*  
ARNOLD MORGADO, JR.  
CHAIR AND PRESIDING OFFICER

Date MAR 22 1989

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Report No. ZCR-168

Resolution No.  
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