

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET
HONOLULU, HAWAII 96813

FRANK F. FASI
MAYOR



RECEIVED
'91 JAN 29 P2:53

SAM CALLEJO
DIRECTOR AND CHIEF ENGINEER

C. MICHAEL STREET
DEPUTY DIRECTOR

January 31, 1991
WEP 91-10

OFC. OF ENVIRONMENTAL QUALITY CONTROL
OFC. OF ENVIRONMENTAL QUALITY CONTROL

Office of Environmental Quality Control
State of Hawaii
465 South King Street, Room 104
Honolulu, Hawaii 96813

Gentlemen:

Waiawa Industrial Park Force Main Replacement
TMK: 1st Div. 9-7-24: Portion of 6
and 1st Div. 9-7-73: Portion of 84

In pursuant of Chapter 343, HRS, this letter is a Notice of Negative Declaration for the Waiawa Industrial Park Force Main Replacement, Waiawa, Ewa, Oahu, Hawaii. This notice of determination was based on an environmental assessment prepared by Belt Collins & Associates, after consulting with other agencies and individuals. Four (4) copies of the Final Environmental Assessment are attached. The pertinent data for this notice are as follows.

1. Proposing Agency - Department of Public Works, City and County of Honolulu.
2. Proposed Action - The proposed project consists of constructing a replacement force main between the Waiawa Industrial Park Wastewater Pump Station and the Waiawa Stream Trunk Sewer.

The existing force main has been subject to eight force main breaks recorded since 1987. All of these breaks have occurred because of an unusual internal corroded groove located at the crown of the pipe. The proposed project is intended to remedy the pipeline's existing corroded state and bring it back to its normal operating condition.

The project site is located in the Waiawa Industrial Park, Waiawa, Ewa, Oahu, Hawaii. The proposed project will be primarily constructed within an abandoned cane haul road.

The project site encompasses an area of approximately 3.0 acres which includes an approximately 60-foot wide area along the approximately 2,160-foot long force main alignment and is identified by the following Tax Map Key designations:

TMK: First Division, 9-7-24: portion of 6
TMK: First Division, 9-7-73: portion of 84

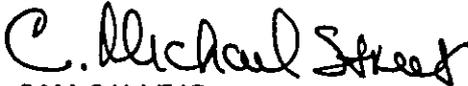
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January 31, 1991
WEP 91-10

The new force main will consist of a 12-inch diameter Polyvinyl Chloride (PVC) pressure pipe buried a minimum of about 4 feet (to crown of pipe) beneath the surface of the ground.

3. Determination - After reviewing the Environmental Assessment prepared for the project and consulting with other government agencies, community organizations and individuals, we have determined that the proposed project will not have a significant impact on the environment, and an Environmental Impact Statement is not required.
4. Reasons Supporting Determination - Reasons and conditions supporting the determination are based on the following criteria. The proposed project will not:
 - affect any rare or endangered flora or fauna;
 - destroy any archaeological, historical or cultural resources;
 - displace any families or commercial establishments;
 - degrade environmental quality;
 - conflict with the State's environmental policies and goals expressed in Chapter 343, HRS.
5. Contact Person - Ed Sakamoto
Division of Wastewater Management
Department of Public Works
650 South King Street, 14th Floor
Honolulu, Hawaii 96813-3017
Telephone No. 523-4325

Very truly yours,


for SAM CALLEJO
Director and Chief Engineer

Attachments: OEQC Form for Publication
EA, 4 copies

cc: Department of General Planning w/attachment
Department of Land Utilization w/attachment
Department of the Navy, PACDIV w/attachment
Department of Land and Natural Resources w/attachment

1991-02-08-0A-FEA

FILE COPY

ENVIRONMENTAL ASSESSMENT
FOR
* WAIAWA INDUSTRIAL PARK FORCE MAIN REPLACEMENT *

WAIAWA, OAHU, HAWAII

TAX MAP KEY:
1st Div. 9-7-24: Portion of 6
1st Div. 9-7-73: Portion of 84

This document was prepared pursuant to Chapter 343, H.R.S.

PROPOSING AGENCY: Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

RESPONSIBLE OFFICIAL:

C. M. Street
for SAM CALLEJO
Director and Chief Engineer

1/24/91
Date

Prepared by:
Bel: Collins & Assoc.

Prepared for:
Division of Wastewater Management

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CHAPTER I
INTRODUCTION

Purpose of Document

This document provides information on the proposed action and assesses its impacts on the environment. The action is being proposed by the Division of Wastewater Management, Department of Public Works, City and County of Honolulu. Because this is an agency action, this environmental assessment has been prepared in accordance with Section 11-200-9 of the Environmental Impact Statement Rules, Title 11, Chapter 200, Department of Health, State of Hawaii, pursuant to Chapter 343, Hawaii Revised Statutes.

Project Location and Proposed Action

The City is proposing to replace an existing sewer force main located between the Waiawa Industrial Park Wastewater Pump Station and the Waiawa Stream Trunk Sewer. The proposed project was initiated due to eight force main breaks recorded since 1987.

The proposed project will primarily be located within an abandoned cane haul road. The proposed project site has been previously graded and altered and will therefore have minimal environmental impacts. The project site is identified by the following Tax Map Key designations, First Division, 9-7-24: portion of 6 and 9-7-73: portion of 84. Refer to Figure 1.

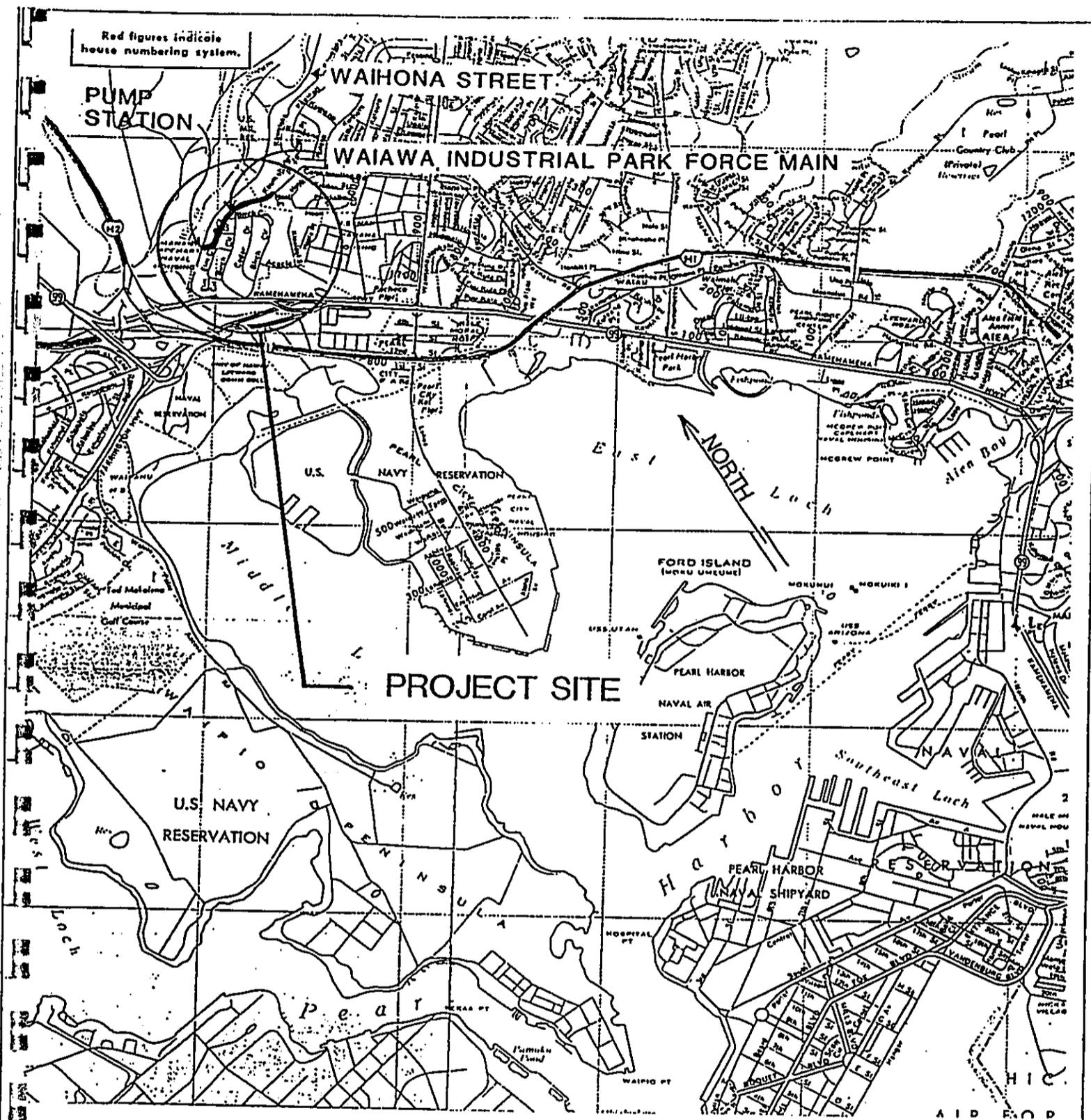
Agencies Consulted

Federal Agencies

- U.S. Navy PACDIV. Real Estate Branch
- U.S. Army Signal Corp.

State Agencies

- Department of Land and Natural Resources
- Department of Health
- Department of Business, Economic Development and Tourism
- Office of Environmental Quality Control



**WAIAWA INDUSTRIAL PARK FORCE MAIN
LOCATION MAP**

SCALE: 1" = 3080'

FIGURE 1

County Agencies

- Department of Land Utilization
- Department of General Planning
- Board of Water Supply
- Department of Transportation Services

Public Utilities

- Hawaiian Telephone Co.
- Hawaiian Electric Co. Inc.
- Gasco Inc.
- Oceanic Cablevision

Others

- Pearl City Neighborhood Board No. 21
- Butch Burke - owner of TMK 9-7-73:84

CHAPTER II
DESCRIPTION OF THE PROPOSED ACTION

Project Description

The proposed project involves the replacement of the existing Waiawa Industrial Park force main with a parallel force main. The existing force main will remain in-place after completion of the proposed force main and will serve as an emergency line. The proposed project site has been previously altered and is expected to have minimal impact on the site. The existing force main has a record of eight breaks since 1987. All of these breaks have occurred because of an unusual internal corroded groove located at the crown of the pipe. The existing force main is 2,160 lineal feet of 10-inch diameter ductile iron pipe. It carries wastewater collected from the Waiawa Industrial Park and the Momilani Villas areas. The wastewater is then pumped uphill to the Waiawa Stream Trunk Sewer-Section 2 near Haawi Way. The wastewater then flows by gravity to the Pearl City Wastewater Pump Station from where it is pumped to the Honouliuli Wastewater Treatment Plant. Refer to Figure 2 for map of tributary area.

Project Objective

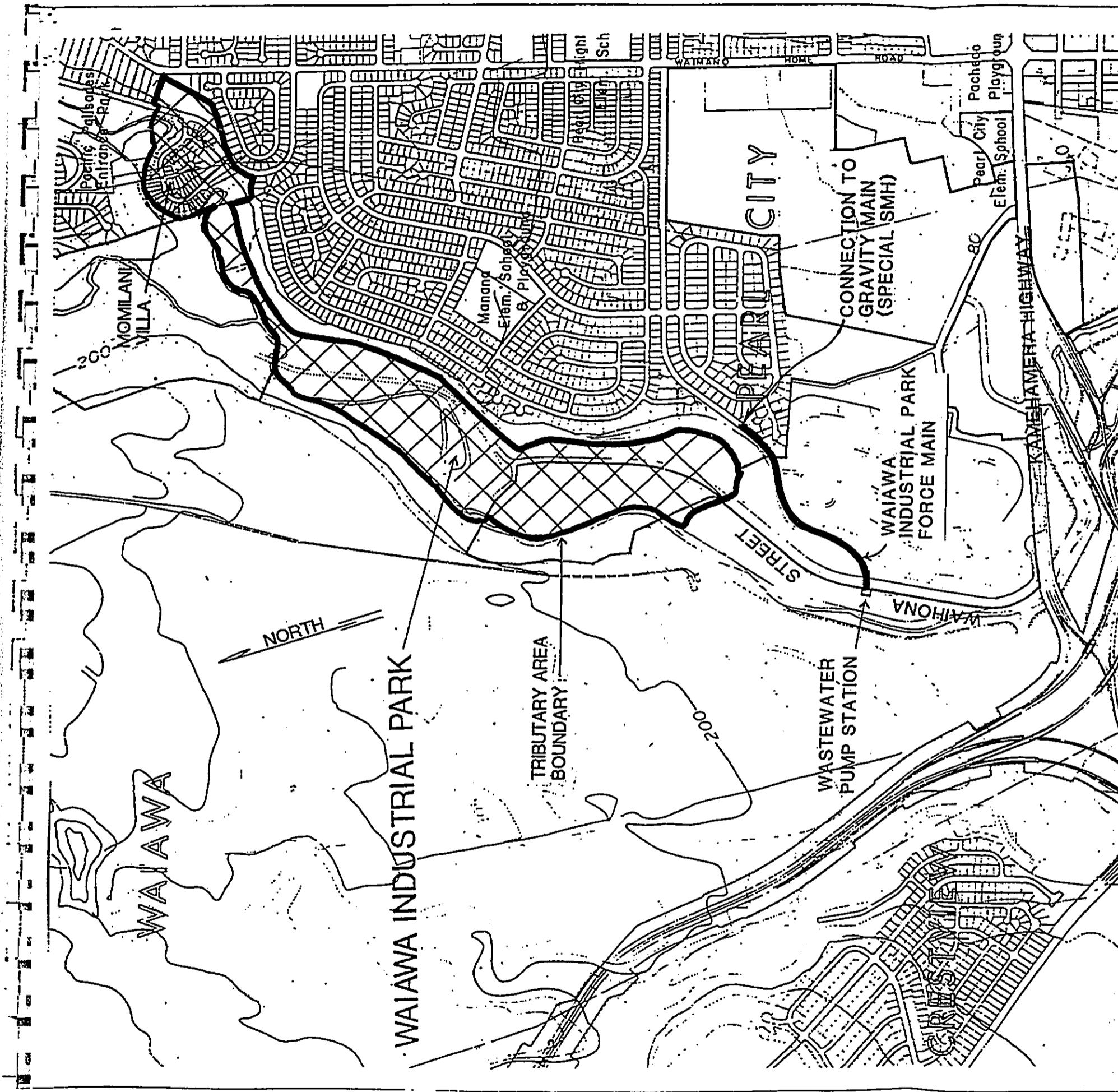
The objective of the proposed project is the replacement of the existing sewer force main. Force main breaks have occurred on several occasions within the last couple of years, creating a hazard to both health and the environment. The proposed project will end the frequent force main breaks and maintenance.

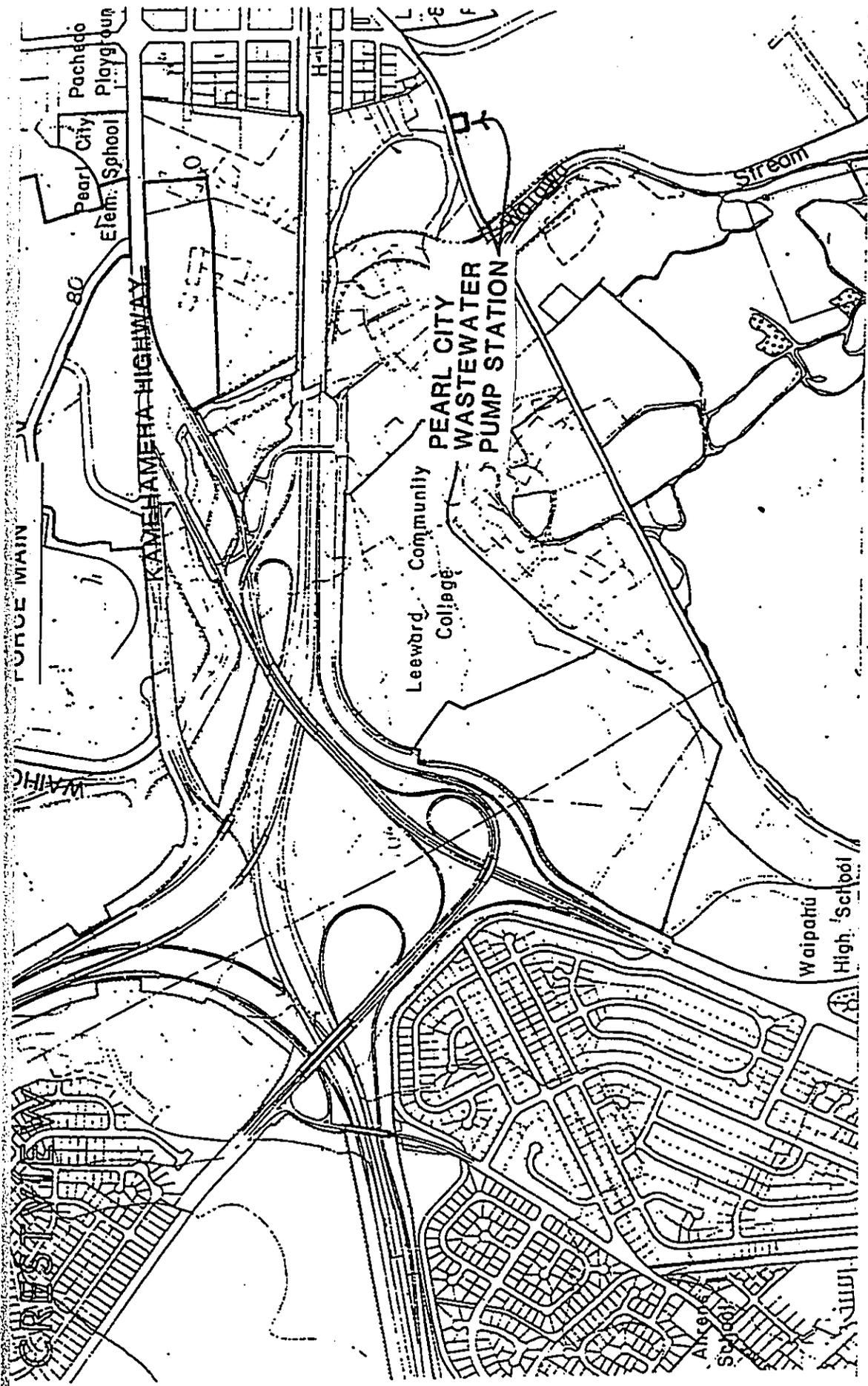
Development Timetable

Project construction is estimated to require approximately 8 months after all of the required government approvals and permits are obtained. Construction is anticipated to begin in October 1991.

Estimated Development Cost

The estimated construction cost of the project is between \$530,000 and \$910,000 depending on the alternative selected.





REFERENCE:
 AREA PROVIDED BY
 DIVISION OF WASTEWATER MANAGEMENT

WAIAWA INDUSTRIAL PARK FORCE MAIN
 TRIBUTARY MAP

SCALE: 1" = 1000'

FIGURE 2

CHAPTER III
LAND USE POLICIES

State Land Use Policies

The project site is currently designated U, Urban and A, Agricultural according to the State Land Use District Boundary maps. Land Use regulation of this area is under the jurisdiction of the City and County of Honolulu. The proposed improvement is consistent with the land use designations of the project site.

City and County of Honolulu Land Use Policies

The City and County of Honolulu has land use control jurisdiction over the site. The following are land use policies that affect the project site.

General Plan

The General Plan Objectives and Policies of the City & County of Honolulu that apply are as follows:

Utilities

Objectives

To meet the needs of the people of Oahu for environmentally sound systems of waste disposal. To maintain a high level of service for all utilities.

Policies

Provide safe, efficient, and environmentally sensitive waste-collection and waste-disposal services. Provide improvements to utilities in existing neighborhoods to reduce substandard conditions.

The proposed project is consistent with the General Plan's Objectives and Policies. The proposed force main replacement will provide an environmentally safe and efficient system that will provide continuous high level of service to the community.

Development Plan

The Development Plan Land Use Map designates the project site as Residential and Preservation. The proposed improvement is consistent with the Development Plan land use designations for the project site. There are no projects on the Development Plan Public Facilities Map that will affect this project.

Zoning

The Land Use Ordinance (LUO) map designates the proposed project site as R-5, (Residential) and F-1, (Military and Federal Zone). The proposed project is within an abandoned cane haul road and is a permitted use on the site.

Special Management Area

The project site is not located within the Special Management Area and is therefore not subject to the SMA Rules and Regulations of the City and County of Honolulu.

Summary of Required Land Use Permits and Approvals

The proposed action is subject to Chapter 343 HRS requirements. No other land use approvals or permits are required.

CHAPTER IV

ENVIRONMENTAL CHARACTERISTICS

Existing Land Use

The proposed force main replacement is located within an abandoned cane haul road. Other utilities located near the project site include an existing Board of Water Supply's 42-inch main and an existing Army Signal Corps cables.

The proposed project will have no impact on the adjacent land uses because it will be located underground within a project site that has been previously altered by such activities such as grading and excavation.

No adverse impacts on the existing land use are anticipated, since the proposed project will not alter the existing land use.

Physiography

The project site varies in elevation from 44 feet at the Waiawa Industrial Park Wastewater Pump Station to 160 feet above mean sea level at the connection to the Waiawa Stream Trunk Sewer. The slope for the proposed project site varies from 0 percent to approximately 20 percent. The alignment that the force main replacement will follow is an abandoned cane haul road. This cane haul road is located on the eastern slope of Waiawa Valley which is the reason for the site's steep gradient.

The proposed project will not alter the physiography of the land since the project involves the replacement of an existing force main. The site has been previously altered by work on the abandoned cane haul road, the existing force main and the other utilities located within the project site. The proposed project will involve trenching and fill, but all finished grades will be the same as the original grades.

Climate

The climate of the Honolulu area is sub-tropical. The project site receives abundant sunshine during most of the year. The northeasterly tradewinds are the prevailing winds during most of the year. The average annual rainfall is approximately 24 inches. The average daily temperature ranges between the high 70's to the high 80's.

Nearshore and Marine Environment

The project site is located approximately 1 mile from Pearl Harbor's Middle Loch and approximately 6 miles from the shoreline and the Pacific Ocean. Because of the distance between the proposed project and shoreline, no adverse impact on the nearshore and marine environment is anticipated.

Surface Water and Drainage

The proposed project will not increase runoff in the area and the site has been previously altered by work on the abandoned cane haul road, the existing force main and other utilities located within the project site.

Construction of the proposed project may create the potential for erosion and sedimentation. The project area is comprised of mainly an undeveloped sparsely vegetated area. Trenching and installation of the force main would expose soil to surface runoff, but since the ground is sparsely vegetated, it is already exposed to the weathering process. To minimize potential erosion and sedimentation, trenching will be conducted in compliance with City and County grading and erosion ordinances.

Hydrology

The proposed project could possibly impact the underlying groundwater aquifer in the event of failure of the force main. Proper remedial and clean-up measures will be implemented in the event of a break.

Geology and Soils

Subsurface investigation was conducted by Dames and Moore for the proposed project. Six borings were drilled to depths ranging from nine to eleven feet. Various amounts of brown and reddish-brown clayey silt, brown and gray silt, and weathered basalt cobbles were found. The soils were found to be of medium stiff to very stiff consistency. The proposed project site has been previously altered by similar projects.

No adverse impact on geology and soils is anticipated because no new fill material will be used.

Flora

The project site consists of very little vegetation. The sides of the cane haul road are covered with brush and haole koa, but are outside of the construction area.

Thus, construction work will have negligible impact on the site's existing vegetation. No endangered or rare species of flora are found on the property.

Fauna

Because the project site consists of very little vegetation, it is a poor habitat for fauna. Any fauna found on the project site are of the transient type and very mobile. Although construction work for the proposed project could possibly impact birds and other fauna that visit the site, the work will be short term and displacement of the wildlife will be temporary. It is anticipated that the fauna will return to the project area once construction is completed. No endangered or rare species of fauna are found on the project site.

Historical, Cultural and Archaeological Resources

There are no historical, cultural, and archaeological resources on the project site. The site has been previously altered by similar utility projects. If any archaeological sites are found during construction, proper mitigating measures will be taken and coordinated with the State Department of Land and Natural Resources.

Visual Character

The visual character of the area will not be altered because the proposed project will be underground. No view planes will be blocked or impacted. The project site is located within an abandoned cane haul road which is concealed by trees and shrubs.

Temporary adverse impacts will occur during the installation of the force main replacement, but the site will be put back to its original condition upon completion of the proposed project.

Air Quality

Temporary adverse impacts on air quality will occur during the construction of the proposed project. Heavy construction equipment that will be used during the construction phase emit exhaust and airborne particulates. The construction work will also produce dust. These impacts will be reduced through the use of approved mitigative measures discussed in Chapter VIII. No adverse impacts are anticipated for the operational phase.

Noise Impact

Temporary adverse noise impact will also occur during the construction of the proposed project. Noise impacts created by the construction equipment such as backhoes and dump trucks will be reduced through the use of approved mitigative measures discussed in Chapter VIII.

Natural Hazards

The proposed project site is not located within any flood plain or tsunami inundation zone. The project site is located on a mountain slope. The Soils Investigation by Dames & Moore did not identify any landslide potential at the project site.

Public Services and Facilities

No adverse impact on public facilities is expected. The proposed project will provide a more reliable level of service to the community because the force main replacement should eliminate future force main breaks or require as much maintenance as the existing force main. Short term impacts in the form of interruption of pumping will occur during the connection of the proposed project to the existing system, but this interruption would only involve a few hours and will occur at a time in which usage is a minimum.

Circulation

The proposed project site is not located on any main thoroughfare. The proposed project will only create a temporary obstruction when it crosses Waihona Street. No long term impacts on traffic circulation are anticipated as a result of the project. The short term temporary impacts on circulation will be mitigated using methods approved by the Department of Transportation Services.

CHAPTER V
SOCIOECONOMIC CONSIDERATIONS

Social Considerations

The proposed force main replacement project will not displace any existing homes or generate a demand for new housing units. Since the proposed project will not directly generate population increase, it will not result in an increased burden on existing community facilities and services.

Economic Considerations

The proposed project will cost between approximately \$530,000 and \$910,000 to construct. It will be a source of employment during its construction phase. It will also be a source of income for those that supply materials for the project construction. The construction workers employed for the project will receive income as a result of working on the project. The government will also indirectly receive income through taxes paid by those involved directly and indirectly in the construction of the project.

CHAPTER VI

SUMMARY OF MAJOR IMPACTS

No major impacts are anticipated as a result of this project. However, the proposed project will have temporary short-term minor adverse impacts on the area's visual character, air quality, sonic quality and circulation during the construction of the project. These are short-lived impacts that will be reduced through the use of mitigation measures described in Chapter VIII.

Positive impacts will occur as a result of this project. As stated previously, the existing force main has been subject to breakage, the project will minimize the chances of a break occurring and provide an environmentally safe and efficient system that will continue a high level of service to the community.

CHAPTER VII ALTERNATIVES

The following is a discussion of the various alternatives considered.

EXISTING FORCE MAIN OPTIONS

No Action Alternative

This alternative would not repair or replace the existing force main and would leave the force main as is. This alternative would have no construction cost, but maintenance costs would continue. This alternative would not be a viable solution because it would result in continued force main breaks and maintenance. Leakage of sewage during force main breaks will cause health risks.

Repair Existing Force Main Crown

For this alternative, a welded steel plate over the existing force main crown would be used. A narrow seam of polyethylene liner will be placed between the existing force main and the new steel plate. This alternative is estimated to cost approximately \$748,000. This method of repair would result in the least interruption of force main service and other existing utilities within the force main corridor. This alternative, however, would not stop corrosion of other portions of the existing pipe that are not protected from corrosion.

Repair Existing Force Main With Insituform Liner

A 1/2 inch thick fiberglass (Insituform) type liner would be used for this alternative. The liner would run the total length of the existing force main and construction cost for this alternative will be approximately \$904,000. This alternative, however, would not be able to handle the future design flow. The exterior of the force main would also need to be cathodically protected to prevent further corrosion.

FORCE MAIN REPLACEMENT OPTIONS

Replace Existing Force Main With 10-inch Diameter Ductile Iron Force Main

This alternative would require a parallel alignment. The 10-inch ductile iron force main will be polylined internally to prevent corrosion. The exterior of the pipeline will be cathodically protected with a factory coated dielectric tape coating system, electrical bonding of pipelines, anode and two wire cathodic protection test stations at 500 feet along the pipeline. Construction cost for this alternative is estimated to be \$579,000. This option proposes a line that is parallel with the existing force main in most areas because of conflicts with an existing 42-inch Board of Water Supply water main and an existing Army Corps signal cable.

Replace Existing Force Main With 12-inch Diameter PVC Force Main

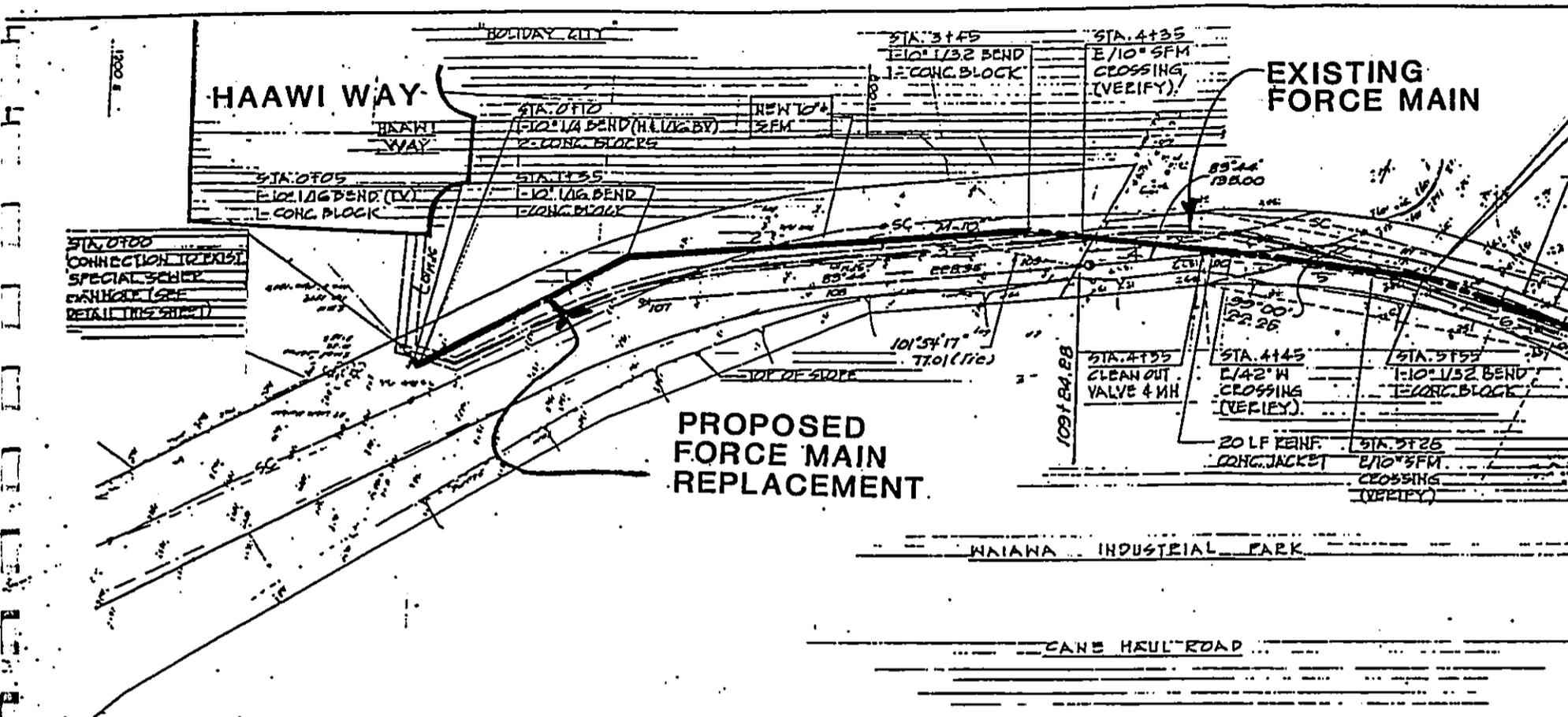
This alternative proposes the use of a 12-inch Diameter PVC (polyvinyl chloride), AWWA C-900, Class 200, pressure pipe, (ductile iron pipe equivalent outside diameter). The alignment for this construction would follow the same as the ductile iron force main alternative. Construction costs for this option is estimated to be \$538,000. The Honolulu Board of Water Supply has used PVC pipe successfully in transmission mains and regularly bids projects with PVC and ductile iron pipe options. PVC pipes are highly resistant to the corrosive elements normally found in wastewater. The pipe is oversized to reduce the water hammer effect, excessive pressure caused by the rapid change in the velocity of the wastewater in the pipe when there is a sudden start up or shut down of the pump station pumps.

Replace Existing Force Main With 14-inch Diameter High Density Polyethylene Force Main

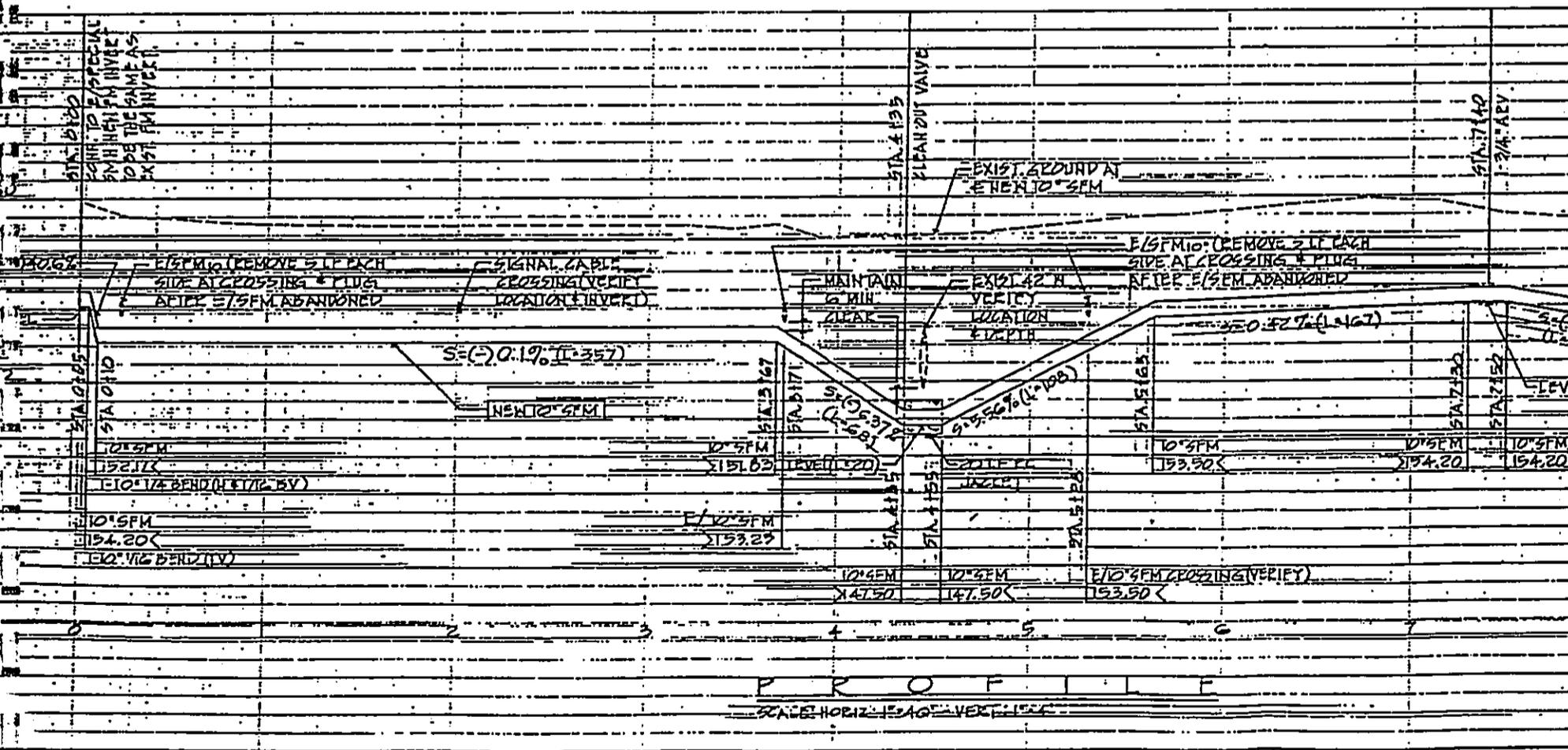
This alternative proposes the use of a 14-inch diameter high pressure HDPE (high density polyethylene), SDR 11, pressure pipe. The alignment will be the same as for the ductile iron force main alternative. The 14-inch diameter is required to accommodate the hammer effect of future flows. Construction cost for this alternative is estimated to be \$599,000. HDPE is noted for excellent corrosion resistance. This type of pipe is not normally used for high pressure flow conditions. Pressure ratings are conservatively estimated for a 50-year service life. The fatigue resistance of HDPE allows it to withstand moderate surge pressures. Velocity must be minimized to keep the surge pressure low, thus a 14-inch diameter pipe was selected.

RECOMMENDED ALTERNATIVE

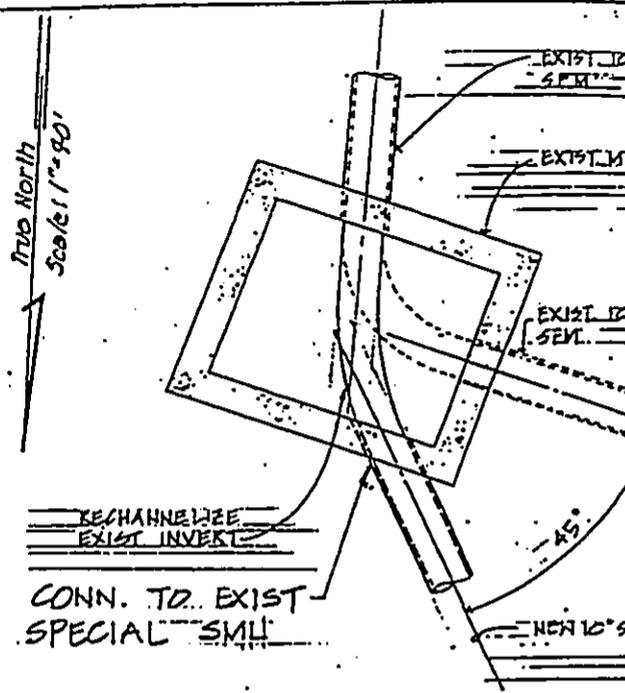
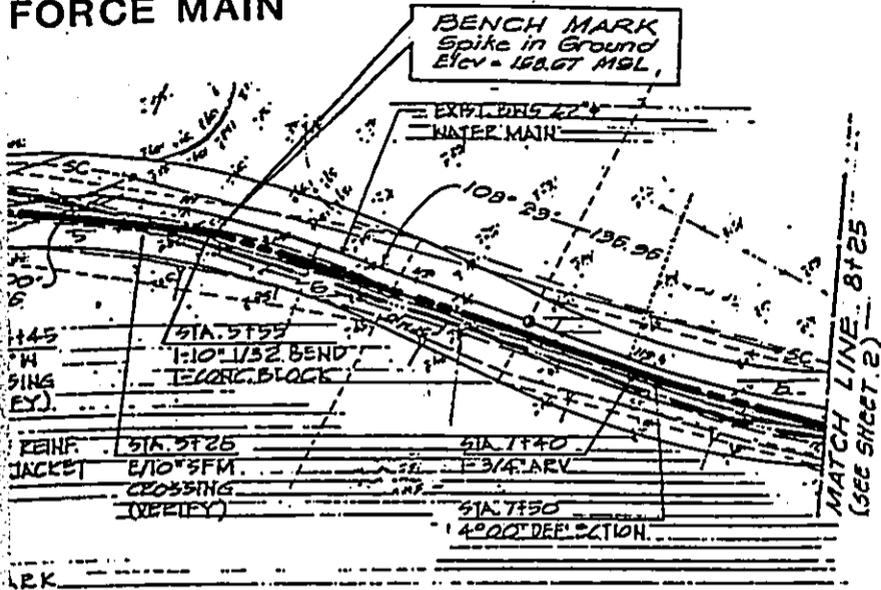
The replacement of the existing force main option is recommended for this project and the recommended material is the 12-inch PVC pipe option. A new 10 feet wide easement for the force main will be required, based on the new alignment. The existing force main will remain in position and be used in case of an emergency. Refer to Figures 3 to 5 for the schematic alignments for replacement of the existing force main.



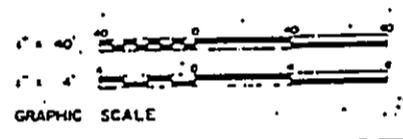
PLAN - RELOCATED SEWER FORCE MAIN
 SCALE: 1" = 40' TMK: 9-7-24:6 (SCHEMATIC ALIGNMENT)



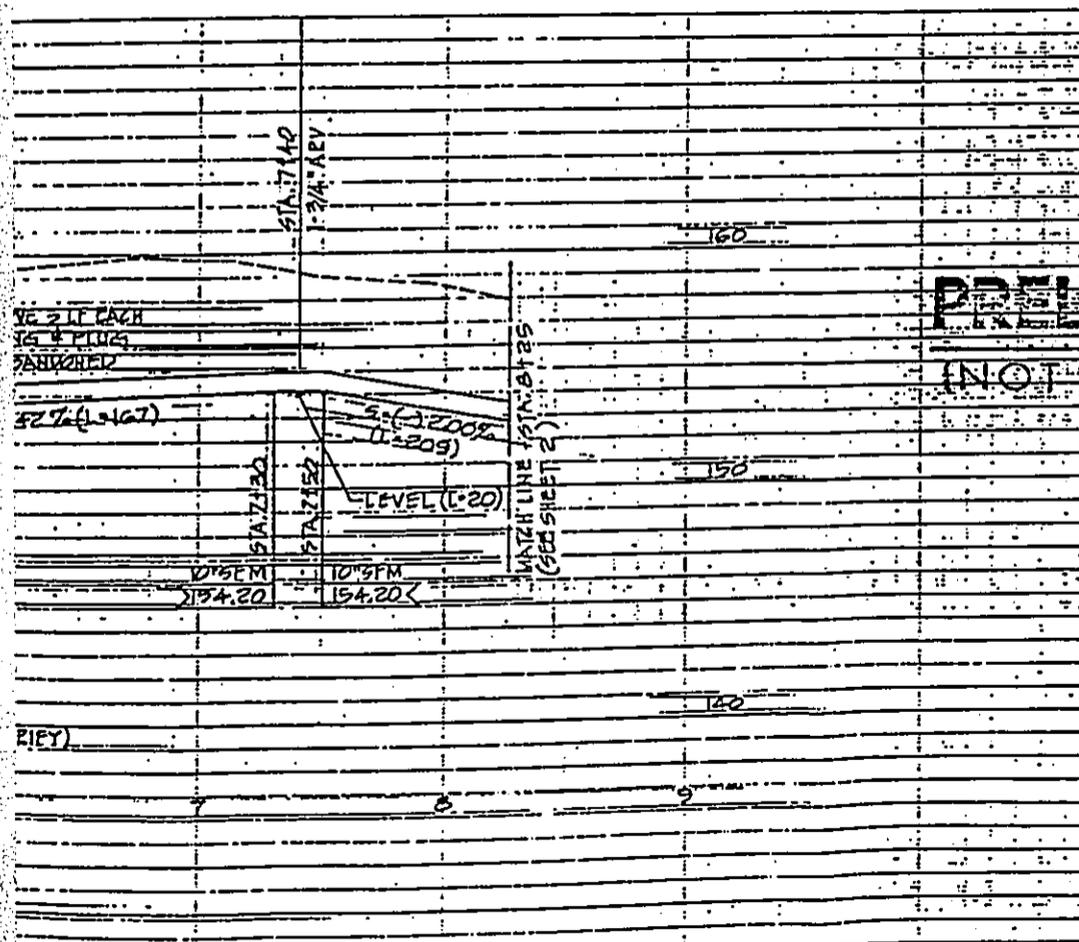
EXISTING FORCE MAIN



PLAN SECTION
DETAIL-CONNECTION TO EXIST. SPECIAL S
 SCALE: 1/2" = 1'-0"



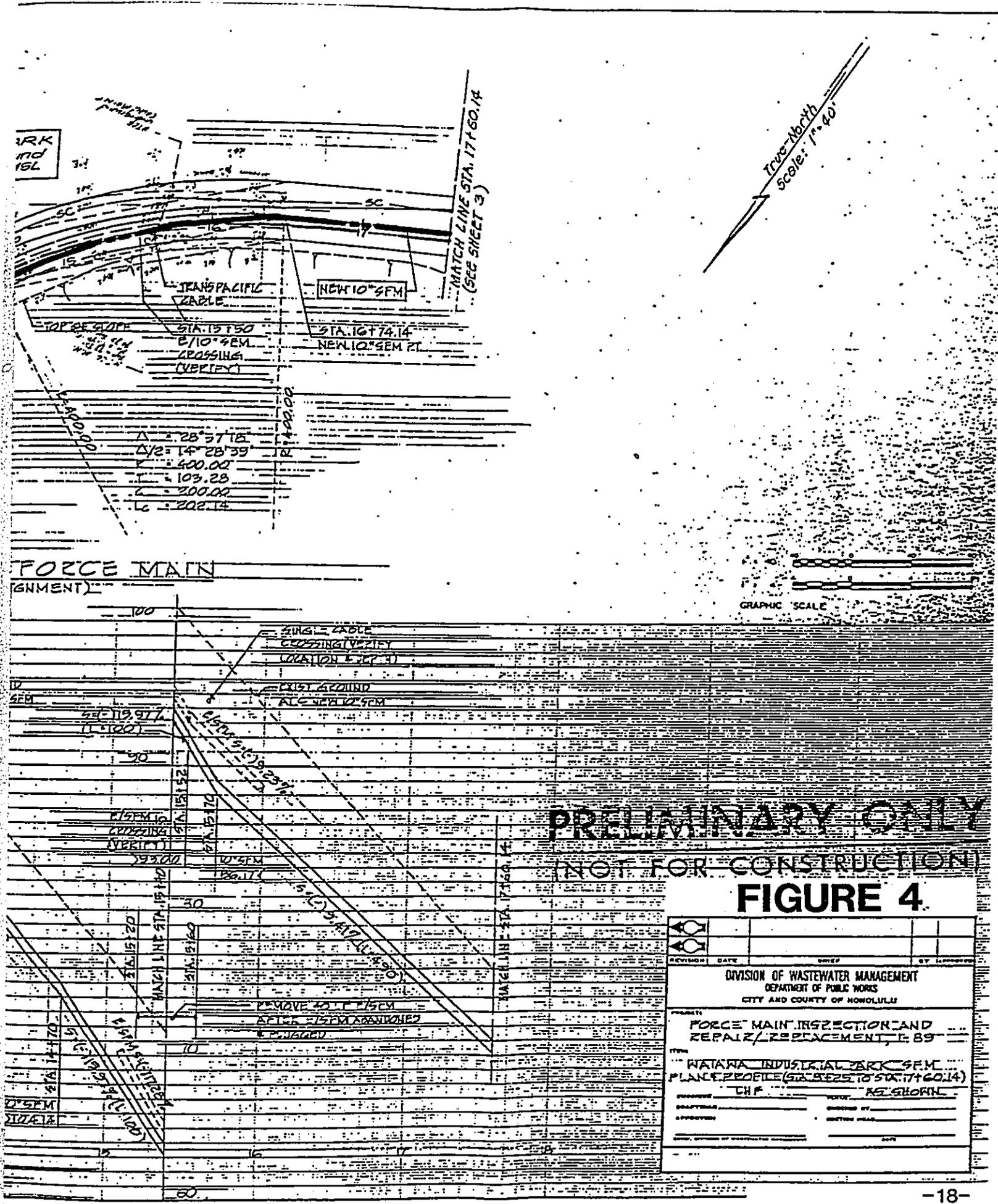
FORCE MAIN (ALIGNMENT)



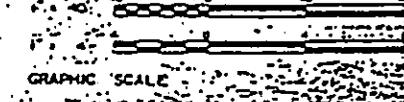
PRELIMINARY ONLY
 (NOT FOR CONSTRUCTION)

FIGURE 3

REVISION	DATE	BY	CHKD
DIVISION OF WASTEWATER MANAGEMENT DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF HONOLULU			
PROJECT: FORCE MAIN INSPECTION AND REPAIR/REPLACEMENT, T-89			
TITLE: WAIANA INDUSTRIAL PARK SEM PLANT PROFILE (STA 7122 TO STA 7125)			
DESIGNED BY:	LHF	CHECKED BY:	AS SHOWN
DRAWN BY:		SECTION HEAD:	
APPROVED:			



True North
Scale: 1" = 40'



PRELIMINARY ONLY
NOT FOR CONSTRUCTION
FIGURE 4.

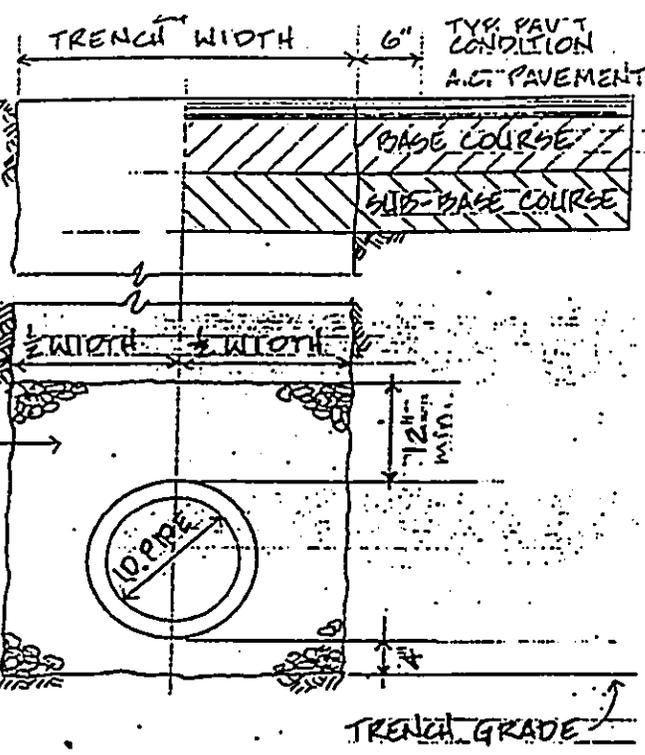
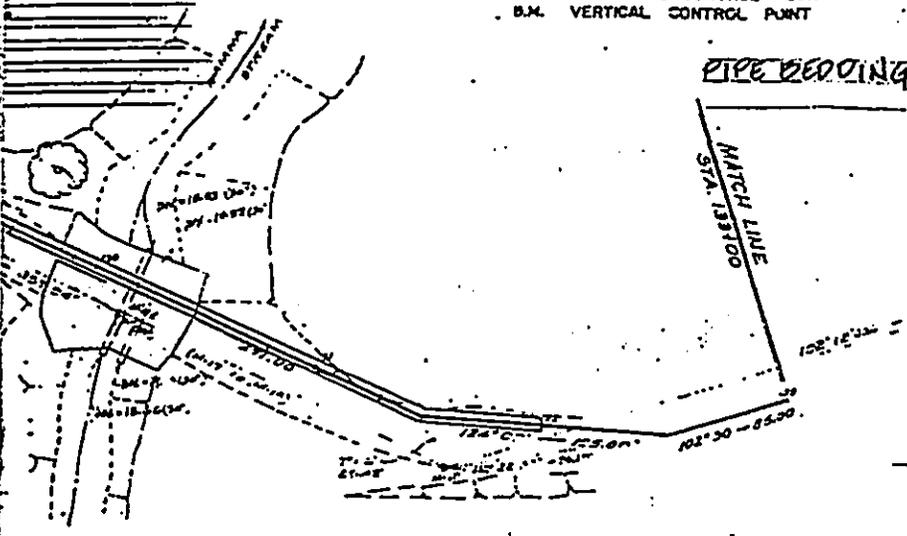
REVISION	DATE	BY	APPROVED BY
DIVISION OF WASTEWATER MANAGEMENT DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF HONOLULU			
PROJECT: FORCE MAIN INSPECTION AND REPAIR/REPLACEMENT, I-89			
SITE: WATAWA INDUSTRIAL PARK SEM PLANT, REEF (STA. 525 TO STA. 1760.14)			
DESIGNED BY	DATE	CHECKED BY	SECTION
APPROVED			

BEND
 LOCK
 15'
 EXIST. 10" SPM
 EXIST. 10" DIA.
 FULL
 (BY LINE 2)

TYP. EXIST. GRD. CONDITION

USE FULL BEDDING...
 FOLLOW ENR
 STANDARD FOR
 MATERIAL

HORIZONTAL CONTROL POINT
 B.M. VERTICAL CONTROL POINT



TYPICAL TRENCH SECTION
 NOT TO SCALE

MAIN

PRELIMINARY ONLY
 (NOT FOR CONSTRUCTION)
FIGURE 5

REVISION	DATE	BY	CHK'D
DIVISION OF WASTEWATER MANAGEMENT DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF HONOLULU			
PROJECT: FORCE MAIN INSPECTION AND REPAIR/REPLACEMENT, 1989			
FROM: WAIANA INDUSTRIAL PARK SEM PLANT/PURPLE (SIA/UT/HE/02/IA 2185)			
DESIGNED BY: C.H.F.		CHECKED BY: B.S. SWANIN	
DRAFTSMAN:		APPROVED BY:	
APPROVED:		DATE:	

JOB NO.

CHAPTER VIII
SUMMARY OF MITIGATING MEASURES

The most noticeable impacts that would be generated by the proposed project would be those from construction work such as dust, noise and traffic disruption. These impacts are temporary, minor in scale, and will last only during the period of construction. The use of mitigative measures will reduce or eliminate these impacts.

Adequate dust control measures will be employed during construction to minimize airborne particles. Adherence to approved erosion control plans and the use of mitigative measures such as water sprinkling will reduce the potential for adverse impact on air quality.

Heavy construction equipment will emit some air pollutants in the form of engine exhausts. With proper maintenance, emissions from these equipment can be minimized. The tradewinds that prevail during most of the year will also be helpful in dispersing the airborne pollutants.

Construction activity will create a temporary increase in noise levels. Heavy equipment used for excavation on the site will be a source of noise. Mitigating measures such as the use of mufflers and limiting construction to daylight hours will be employed. Noise levels shall comply with the State Department of Health noise regulations.

The proposed project will temporarily obstruct traffic when it crosses Waihona Street. A traffic control plan approved by the City and County will be used to minimize impact on traffic circulation.

CHAPTER IX
DETERMINATION

The alternative selected for this project is the replacement of the existing force main with 12-inch diameter PVC force main. This assessment shows the proposed project will have no significant negative impact on the environment and an Environmental Impact Statement is not required. Therefore, in accordance with the provisions of Chapter 343, Hawaii Revised Statutes, a Negative Declaration is determined to be in order.

CHAPTER X

FINDINGS AND REASONS SUPPORTING DETERMINATION

The following findings and reasons support the determination that there will be no significant effect on the environment as a result of this project:

1. There will be no adverse social or economic impacts as a result of the proposed project.
2. The impacts that are associated with construction of the proposed project are temporary impacts. All short-term impacts will be mitigated and minimized in accordance with applicable City and County of Honolulu, State of Hawaii and Federal rules and regulations.
3. No rare or endangered wildlife or flora will be affected by the proposed action.
4. No known archaeological, cultural or historical sites are located on the project site. Should any archaeological feature be found during construction work, the Department of Land and Natural Resources, Historic Sites Section will be notified and the appropriate measures will be taken.
5. There will be no significant adverse impact on the visual environment.
6. The proposed force main replacement will be beneficial to the community because it should minimize future force main breaks, reduce the amount of maintenance and reduce health risks. The proposed project will create a more efficient and safe sewer force main system.

CHAPTER XI

COMMENTS AND RESPONSES FROM AGENCIES

A draft environmental assessment for this project was transmitted to the following agencies for comment. The agencies that responded are indicated below. Comments from these agencies have been incorporated into this environmental assessment.

<u>Federal Agencies</u>	<u>Agencies Responded</u>	<u>Agency Letter Attached in this Chapter</u>	<u>No Response</u>
U.S. Army Signal Corp.	x	x	
U.S. Navy PACDIV. Real Estate Branch	x	x	
<u>State Agencies</u>			
Department of Land and Natural Resources	x	x	
Department of Health	x	x	
Department of Business and Economic Development	x	x	
Office of Environmental Quality Control			x
<u>County Agencies</u>			
Department of Land Utilization			x
Department of General Planning	x	x	
Board of Water Supply	x	x	
Department of Transportation Services	x	x	
<u>Public Agencies</u>			
Hawaiian Telephone Co.			x
Hawaiian Electric Co. Inc.	x	x	
Gasco Inc.	x	x	
Oceanic Cablevision			x
<u>Others</u>			
Pearl City Neighborhood Board No. 21 Butch Burke owner of TMK 9-7-73:84	x	x	x

90-6705-1000

DEPARTMENT OF THE NAVY
PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
(HONOLULU, HI)
RECEIVED
PEARL HARBOR, HAWAII 96822-1000
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SER 231/9868
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DECLARED 90-2733

NOV 22 11 24 AM '90

DIV. OF
MILITARY
MANAGEMENT

October 17, 1990

Department of Public Works
City and County of Honolulu
Attention: Mr. Ed Sakamoto
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Sakamoto:

With reference to your letter dated October 12, 1990 on Waiala Industrial Park Force Main Replacement, the draft prepared by Belt Collins & Associates indicates existing Army Signal Corps cables in the vicinity of the project site.

Since Hawaiian Telephone Company (HTCO) operates and maintains all of our Signal Corps cables, they will respond to you if any of our cables have any impact on the project site. It is noted that HTCO has been consulted as indicated on the draft environmental assessment package, so we will take no further action unless so notified by HTCO.

Attachment to your letter has been withdrawn. If you have any questions, please contact Charles Klaura at 438-8066.

Sincerely,

Charles Klaura
CHARLES KLAURA
Chief, Base Communications
1116th U.S. Army Signal Battalion
Fort Shafter, HI 96858-5415

cc: HTCO Mr. Mack Taosaka

Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
City & County of Honolulu
650 S. King Street
Honolulu, HI 96813

Dear Mr. Callejo:

Subj: DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR WAIANA INDUSTRIAL PARK FORCE MAIN REPLACEMENT

In reference to your letter WEP 90-230E of October 12, 1990, Pacific Division, Naval Facilities Engineering Command have reviewed subject EA and have no comments.

Thank you for the opportunity to review the draft. The Navy would like to receive a copy of the Final EA. Please send copy to Commander Naval Base, Pearl Harbor, Code 00F2, who is the point of contact for environmental documents.

Sincerely,

J. M. Kilian
J. M. KILIAN
Assistant Head
Facilities Planning and
Real Estate Department

NOV 26 1980
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P. O. BOX 511
HONOLULU, HAWAII 96813

90-6687

WILLIAM W. PATR. CHRISTENSEN
DIRECTOR OF LAND AND NATURAL RESOURCES

ADMINISTRATIVE SERVICES
PLANNING & DEVELOPMENT
ARCHITECTURE
AGRICULTURE
CIVIL ENGINEERING
CONSTRUCTION AND
REPAIRS
ELECTRICAL
GENERAL MAINTENANCE
LAND MANAGEMENT
LAND SURVEYING
PLANNING AND DEVELOPMENT
RECORDS AND COMMUNICATIONS
STATE AND LAND DEVELOPMENT

Honorable Sam Callejo

-2-

Doc. No.: 0358E

Thank you again for your cooperation in this matter. Please feel free to call me or Bob Johnson at our Office of Conservation and Environmental Affairs, at 548-7837, if you have questions.

Very truly yours,

William W. Dwyer
William W. Dwyer

cc: DOPAM

File No.: 91-170
Doc. No.: 0358E

NOV 26 1980

The Honorable Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Callejo:

SUBJECT: Draft Environmental Assessment for Waiala Industrial Park Force Main Replacement, Waiala, Oahu; TMS; 9-7-84; por. 6 and 9-7-73; por. 84

Thank you for giving our Department the opportunity to comment on this matter.

We have reviewed the materials you submitted and have the following comments.

Since the project is to replace an existing sewer force main it is highly unlikely that there are significant historic sites present. We believe the project will have no effect on significant historic sites.

There should be no significant impact to aquatic resources provided provisions are taken during construction to prevent eroded soils, silt, and other debris from entering the water. Please stress the coastal nature of Pearl Harbor's East and Middle Bays.

We may have further comments for the Final EA.

CORRECTION

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

JOHN HANLEY
DIRECTOR OF LAND

RECEIVED W/MS
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 311
HONOLULU, HAWAII 96813

90-6667
WILLIAM W. FETZ, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

W/MS

EDITH W. AYRE
MARIEE TAKEMOTO
RUSSELL K. FURUMOTO
ADMINISTRATIVE DEVELOPMENT
PROGRAM
AGRICULTURAL RESOURCES
MANAGEMENT
COMMUNITY AFFAIRS
COOPERATION AND
RESPONSES DEVELOPMENT
CONSERVATION
PLANNING AND
POLITICAL PARTICIPATION
PROGRAM
LAND MANAGEMENT
PLANNING AND
DEVELOPMENT

File No.: 91-170
Doc. No.: 0358E

NOV 26 1980

REF:OCEA:JN

The Honorable Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Callejo:

SUBJECT: Draft Environmental Assessment for Waiawa Industrial
Park Force Main Replacement, Waiawa, Oahu; TRK:
9-7-24; por. 6 and 9-7-73; por. 84

Thank you for giving our Department the opportunity to comment on
this matter.

We have reviewed the materials you submitted and have the following
comments.

Since the project is to replace an existing sewer force main it is
highly unlikely that intact significant historic sites are
present. We believe the project will have "no effect" on
significant historic sites.

There should be no significant impact to aquatic resources provided
precautions are taken during construction to prevent eroded soils,
debris, petroleum products and other contaminants from entering the
nearby Waiawa Stream and coastal waters of Pearl Harbor's East and
Middle Locks.

We may have further comments for the Final EA.

Honorable Sam Callejo -2- Doc. No.: 0358E

Thank you again for your cooperation in this matter. Please feel
free to call me or Bob Johnson at our Office of Conservation and
Environmental Affairs, at 548-7837, if you have questions.

Very truly yours,

William W. Fetz
William W. Fetz

cc: DDFAW

JOHN WARE
GOVERNOR
PO BOX 111
HONOLULU, HAWAII 96810
PHONE: (808) 534-1111

RECEIVED
DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM
1011 KALANOAU AVENUE, SUITE 200
HONOLULU, HAWAII 96813
PHONE: (808) 548-4000
FAX: (808) 548-4111



90-6911

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STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3171
HONOLULU, HAWAII 96811
December 12, 1990

IN REPLY, PLEASE REFER TO
EPHSD
90-3-231

October 24, 1990
WEP 90-2301

MEMORANDUM

To: Sam Callejo, Director & Chief Engineer
Department of Public Works
City & County of Honolulu

From: Director of Health

Subject: Draft Environmental Assessment (DEA)
Waiala Industrial Park Force Main Replacement

Mr. Sam Callejo
Director and Chief Engineer
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Thank you for allowing us to review and comment on the subject DEA. We strongly support this project as it is needed to replace part of the existing system which has had a number of breaks over the last several years.

Subject: Draft Environmental Assessment for
Waiala Industrial Park Force Main Replacement

We wish to inform you that we have no comments to offer on the subject environmental impact statement. However, we do concur with the preliminary conclusion that a negative declaration is appropriate.

Thank you for the opportunity to review the document.

Sincerely,

Sam Callejo
for Roger A. Uiver

HRK:hkts17

John C. Lewin
JOHN C. LEWIN, M.D.

90-5479 WJWM

DEPARTMENT OF GENERAL PLANNING
CITY AND COUNTY OF HONOLULU

DEPT OF PUBLIC WORKS
480 SOUTH KING STREET
HONOLULU, HAWAII 96813

NOV 9 10 14 AM '90

FRANKIE FARR
MAIL ROOM

TO _____



BENJAMIN LEE
CHIEF PLANNING OFFICER
ROLAND D. LEBST, JR.
SENIOR CHIEF PLANNING OFFICER
VM 10/90-2801

November 5, 1990

MEMORANDUM

Sam

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: BENJAMIN B. LEE, CHIEF PLANNING OFFICER
DEPARTMENT OF GENERAL PLANNING

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR WAIYAWA INDUSTRIAL
PARK FORCE MAIN SEWER REPLACEMENT

Thank you for this opportunity to review and comment upon the subject Draft Environmental Assessment (EA). We offer the following comments for your consideration.

1. The proposed project is consistent with the City and County of Honolulu's General Plan Objectives.

"To meet the needs of the people of Oahu for an adequate supply of water and for environmentally sound systems of waste disposal" and

"To maintain a high level of service for all utilities."

2. The Primary Urban Center (PUC) Development Plan Land Use Map designates the tributary area (Figure 2, subject EA) for Residential, Industrial, Military and Public Facility uses. No amendment of the PUC DPPF Map is required for the replacement of this sewer force main.

We agree with your assessment that there will be no significant effects on the environment as a result of this project and that an Environmental Impact Statement is not required.

If you have further questions concerning our comments, please call Verne Wingquist at 527-6044.

B. Lee
BENJAMIN B. LEE
Chief Planning Officer

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANA STREET
HONOLULU, HAWAII 96813

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November 13, 1990

WUM

90-5509

FRANK F. FASL, Mayor
DOMINA B. GOYK, Chairman
SOTIRIA M. DAVENIAH, CHIEF, O.S.F.
Vice Chairman
SAM CALLEJO
EDWARD T. HATA
WALTERO WATSON, JR.
MAURICETI TAMAOKO
KAZU HAYASHIDA
Manager and Chief Engineer

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
450 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK FASL
Mayor

SAM CALLEJO
DIRECTOR AND CHIEF ENGINEER
C. MICHAEL STREET
SENIOR DIRECTOR

WEP 90-358

December 21, 1990

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: FOR KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR WAIAWA
INDUSTRIAL PARK FORCE MAIN REPLACEMENT.
TMK: 9-7-24; POR. 6; 9-7-73; POR. 84, WAIAWA, OAHU

MEMORANDUM

TO: MR. KAZU HAYASHIDA, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

FROM: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR
WAIAWA INDUSTRIAL PARK FORCE MAIN REPLACEMENT

Thank you for the opportunity to review and comment on the draft EA for the force main replacement project.

We have the following comments to offer:

1. The construction plans should be submitted for our review and approval prior to construction. This will help to eliminate any conflicts between the proposed force main and our water system.
2. The document should discuss the potential impact to the underlying groundwater aquifer in the event of failure of the force main. Mitigative measures to address this impact should also be included in the discussion.

If you have any questions, please contact Bert Kuiuoka at 527-6138.

Thank you for your letter of November 13, 1990 commenting on the subject draft environmental assessment. This letter provides our response to your comments.

The construction plans for this project will be submitted to your office for review in order to eliminate any conflicts between the proposed force main and the water system. Revisions have been made per your comments regarding the potential impact on the underlying groundwater aquifer from failure of the force main.

Thank you for your assistance on this project.

S. Callejo
SAM CALLEJO
Director and Chief Engineer

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

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HONOLULU MUNICIPAL BUILDING
450 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK P. FARM
MAYOR

ALFRED J. THIEDE
DIRECTOR
JOSEPH M. MAGALDI, JR.
DEPUTY DIRECTOR

TE-5800
PL90.1.335

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

450 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK P. FARM
MAYOR

SAM CALLEJO
DIRECTOR AND CHIEF ENGINEER
C. MICHAEL STREET
DEPUTY DIRECTOR

November 2, 1990

December 21, 1990

HEP 90-359

MEMORANDUM

TO: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

FROM: ALFRED J. THIEDE, DIRECTOR

SUBJECT: WAIANA INDUSTRIAL PARK FORCE MAIN REPLACEMENT
DRAFT ENVIRONMENTAL ASSESSMENT, THK: 9-7-24 & 9-7-73

This is in response to your memorandum dated October 12, 1990 requesting our review and comment on the subject assessment.

Our concerns are as follows:

1. The neighborhood board should be informed of this proposed project.
2. Construction plans, including traffic control plan showing temporary detours, should be reviewed by our department.

Should you have any questions, please contact Lance Watanabe of my staff at Local 4199.

Alfred J. Thiede
ALFRED J. THIEDE

MEMORANDUM

TO: MR. JOSEPH M. MAGALDI, JR., DIRECTOR
DEPARTMENT OF TRANSPORTATION SERVICES

FROM: SAM CALLEJO, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR
WAIANA INDUSTRIAL PARK FORCE MAIN REPLACEMENT

Thank you for your letter of November 2, 1990 commenting on the subject draft environmental assessment. This letter provides our response to your comments.

The Pearl City Neighborhood Board was informed and has commented on the draft environmental assessment. Construction plans including a traffic control plan will be submitted to your department for review.

Thank you for your assistance on this project.

Sam Callejo
SAM CALLEJO
Director and Chief Engineer

Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840-0001

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WUH

NOVEMBER 8, 1990



Sam A. Bonnet
Manager
Environmental Department

Mr. Sam Callejo
Department of Public Works
City and County of Honolulu
November 8, 1990
Page 2

Mr. Sam Callejo
Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Callejo:

Subject: Draft Environmental Assessment for
Waiawa Industrial Park Force Main Replacement

We have reviewed the subject EIS and have the following comments:

1. There are several HECO underground lines that cross the sewer line, and may be an interference. The design engineering firm should check with HECO for our drawings on the subject area.
2. The Contractor is to exercise extreme caution when the excavation and construction crosses or is in proximity to HECO's facilities.
3. The Contractor is to comply with the directions of the State of Hawaii Occupation Safety and Health Law (DOSH).
4. When excavation is adjacent to or under existing facilities, the Contractor is responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins, and settlement, and for properly supporting existing facilities with beam, struts, or underpinning to fully protect these from damage.
5. Should it become necessary, any work required to relocate HECO facilities shall be done by HECO. The Contractor shall be responsible for all costs and coordination.

6. The Contractor shall be liable for any damages to HECO's facilities, and shall report such damages immediately to HECO's Trouble Dispatch at phone number 543-7874.

Sincerely,

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
430 SOUTH KING STREET
HONOLULU, HAWAII 96813



SAM CALLEJO
DIRECTOR AND CHIEF ENGINEER
C. MICHAEL STREET
REPORT SECTION

WEP 90-360

December 20, 1990

Mr. William A. Bonnet, Manager
Environmental Department
Hawaiian Electric Company, Inc.
P. O. Box 2750
Honolulu, Hawaii 96840-0001

Dear Mr. Bonnet:

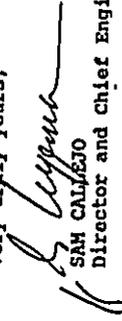
Subject: Draft Environmental Assessment for Maiawa
Kalahele Industrial Park Force Main Replacement

Thank you for your letter of November 8, 1990 commenting on the subject draft environmental assessment. This letter provides our response to your comments.

The design engineer has previously checked with HECO and has the drawings for the subject area. Provisions will be made to coordinate the construction of the force main replacement with HECO and the existing underground facilities.

Thank you for your assistance on this project.

Very truly yours,


SAM CALLEJO
Director and Chief Engineer

The Gas Company
345 Kamehameha Street
PO Box 3370 Honolulu, Hawaii 96842
Telephone (808) 547-3333
Telex 743252
Fax (808) 547-3333 547-3561

WPH

90-5759

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TO _____



November 6, 1990

Department of Public Works
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Attention: Mr. Sam Callejo
Director and Chief Engineer

Gentlemen:

Subject: Draft Environmental Assessment for
Maiana Industrial Park Force Main Replacement

In response to your letter WEP90-230K dated October 12, 1990, the
subject area is currently clear of gas facilities and we do not
have any comments to the Draft Environment Assessment.

Should there be any questions, or if additional information is
desired, please call me at 547-3574.

Very truly yours,

Edwin N. Sawa

Edwin N. Sawa
Manager, Engineering

ENS:glk
9/117

PEARL CITY NEIGHBORHOOD BOARD NO. 21
P.O. BOX 1023
PEARL CITY, HAWAII 96783

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CITY OF PEARL CITY

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90-5273

WYM

Mr. Sam Callejo
Page 2
October 26, 1990

5. On page 14, discuss the use of PVC pipe to eliminate or minimize corrosion.
6. On page 15, the term "water hammer effect" should be explained.
7. On page 15-16, indicate the disposition of the "old" force main easement.
8. On page 20, discuss mitigation measures for potential landslide conditions indicated on page 11.
9. For Figures 3, 4 and 5, we believe that the Signal Corps line is actually the location of the existing AT & T/HKDC TransPacific Cable.
10. On Figures 3 and 4, indicate the location of the existing 10" force main.
11. On Figure 5, indicate the size and location of the existing gravity sewer line from Maiala Industrial Park entering the Maiala Sewage Pump Station.

Thank you for allowing us to provide input on this project, which will be a great benefit for the Pearl City community.

Very truly yours,

Thomas K.Y. Nam
Thomas K.Y. Nam
Chairman

cc: Ed Sakamoto, DMPH
PC M.Ed. Members
N. Commission

Mr. Sam Callejo
Director and Chief Engineer
DEPARTMENT OF PUBLIC WORKS
City & County of Honolulu
650 South King Street, 11th Floor
Honolulu, HI 96813

Dear Mr. Callejo:

Subject: Maiala Industrial Park Force Main Replacement
Draft Environmental Assessment (EA)

This is to inform you that the Development Plan and Zoning Committee of the Pearl City Neighborhood Board No. 21 reviewed your October 12, 1990 submittal of the proposed document. At its October 25, 1990 regular meeting, the Board voted (11-0-0) to concur with your findings and recommends approval of a Negative Declaration for the proposed action, as there will be no major adverse impacts created by this project.

We would like to provide the following comments for disclosure in the Final EA/Negative Declaration document:

1. The page numbers for Figures 1 through 5 should be indicated on the bottom/right portion of each map.
2. In Figure 2, indicate limits and location of the existing gravity trunk sewer main to the Pearl City SPS.
3. On page 7, 1st paragraph, indicate applicability of this project for designation on the Primary Urban Center (PUC) Development Plan Public Facility Map (PFM). Are there any projects indicated on the current PUC PFM which may affect the proposed action?

On page 11, 3rd paragraph, discuss short-term impacts which would be created when connection of proposed project to the existing system is undertaken and interruption of service occurs.

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU

440 SOUTH KING STREET
HONOLULU, HAWAII 96813



FRANK F. FARI
Mayor

SAM CALLEJO
DIRECTOR AND CHIEF ENGINEER
C. MICHAEL STREET
PEARL CITY, HAWAII

December 21, 1990

HEP 90-361

Mr. Thomas K. Y. Kan, Chairman
Pearl City Neighborhood Board No. 21
P. O. Box 1025
Pearl City, Hawaii 96782

Dear Mr. Kan,

Subject: Draft Environmental Assessment for
Maawa Industrial Park Force Main Replacement

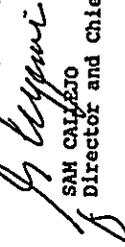
Thank you for your letter of October 26, 1990 commenting on the
subject draft environmental assessment.

We will incorporate appropriate revisions per your comments
regarding the above described project.

The location of the Pearl City Wastewater Pump Station has been
identified on in Figure 2. Information on the location of the
gravity sewer system from the force main to Pearl City Wastewater
Pump Station may be obtained from the Division of Wastewater
Management.

Thank you for assistance on this project.

Very truly yours,


SAM CALLEJO
Director and Chief Engineer

REFERENCES

Federal Emergency Management Agency (September 4, 1987). "Flood Insurance Rate Map: Panel 65 of 135 (Community Panel Number 150001-0065-B)". National Flood Insurance Rate Program.

United States Department of Agriculture, Soil Conservation Service. (August 1972). Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii. Washington, D.C.