

Salt Lake Blvd, 36-Inch  
Transmission Main

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



March 28, 1998

JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RECEIVED

RAYMOND H. SATO  
Manager and Chief Engineer

'98 APR 28 PM 4:10

RECEIVED  
QUALITY CONTROL

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

Dear Mr. Gill:

**Subject: Finding of No Significant Impact for the Board of Water Supply's Proposed Salt Lake Boulevard 36-Inch Transmission Main from Foster Village to Aliamanu, Honolulu, Oahu, Hawaii, TMK: 1-1-17, 18, 21 and 71**

The Board of Water Supply has reviewed the comments received during the public comment period which began on December 8, 1997. We have determined that the environmental impacts of this project have been adequately addressed as discussed in the final environmental assessment (EA) and are therefore, issuing a finding of no significant impact. We request that the proposed well project be published as finding of no significant impact in the next Office of Environmental Quality Control (OEQC) Bulletin.

Attached are the completed OEQC bulletin publication form and four copies of the final EA for your review.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

  
RAYMOND H. SATO  
Manager and Chief Engineer

**Attachments**

cc: Sheldon Yamasato, Akinaka and Assoc., Inc.

0000 0025 2632

1998-05-08-0A-*FEA-Salt Lake Boulevard*<sup>MAY</sup> 8 1998  
*36-Inch Transmission Main*

**FILE COPY**

**FINAL ENVIRONMENTAL ASSESSMENT**

For the

**SALT LAKE BOULEVARD 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II  
Salt Lake, Oahu, Hawaii**

**MARCH 1998**

Proposing Agency:

**BOARD OF WATER SUPPLY  
City & County of Honolulu  
630 South Beretania Street  
Honolulu, Hawaii 96843**

Prepared By:

**Akinaka & Associates, Ltd.  
Consulting Engineers  
250 N. Beretania Street, Suite 300  
Honolulu, Hawaii 96817  
Phone: (808) 536-7721 Fax: (808) 521-2153**

## TABLE OF CONTENTS

	Page
<b>SECTION 1 - PROJECT DESCRIPTION</b> .....	1
1.1 Purpose of Proposed Action .....	1
1.2 Location .....	1
1.3 Description of Proposed Action .....	1
1.3.1 Proposed Action .....	1
1.3.2 Permits, Coordination and Approvals Required .....	5
1.3.3 Construction Materials and Methods .....	6
1.4 Estimated Construction Schedule and Cost .....	8
 <b>SECTION 2 - AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATIVE MEASURES</b> .....	 9
2.1 Existing Land Use .....	9
2.2 Topography and Soils .....	9
2.3 Flood Zone Designation .....	14
2.4 Surface Water .....	14
2.5 Flora and Fauna .....	14
2.6 Noise .....	16
2.7 Air Quality .....	16
2.8 Recreation .....	17
2.9 Historic Sites and Archaeological Resources .....	17
2.10 Aesthetic Values .....	17
2.11 Economic Activity .....	18
2.12 Utilities .....	18
2.13 Roadways and Traffic .....	19
2.14 Police, Fire and Emergency Services .....	20
2.15 Public Services and Facilities .....	20
 <b>SECTION 3 - ALTERNATIVES TO THE PROPOSED ACTION</b> .....	 21
3.1 No Action .....	21
3.2 Alternative Alignments .....	21
3.3 Delayed Action .....	21
 <b>SECTION 4 - AGENCIES CONSULTED</b> .....	 22
4.1 Pre-Assessment Agencies Consulted for Preparation of DEA .....	22
4.2 Draft Environmental Assessment Circulation List .....	22
 <b>SECTION 5 - DETERMINATION</b> .....	 24
 <b>SECTION 6 - REFERENCES</b> .....	 25
 <b>APPENDIX A - PRE-ASSESSMENT CONSULTATION COMMENTS</b> .....	 26
 <b>APPENDIX B - DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS AND RESPONSES</b> .....	 39

0000 0025 2634

**LIST OF EXHIBITS**

	Page
1. EXHIBIT 1 - PROJECT VICINITY MAP .....	2
2. EXHIBIT 2 - PROJECT LOCATION MAP .....	3
3. EXHIBIT 3 - PROPOSED SYSTEM SCHEMATIC LAYOUT .....	4
4. EXHIBIT 4 - TYPICAL TRENCH & PAVEMENT RESTORATION DETAILS .	7
5. EXHIBIT 5 - STATE LAND USE MAP .....	10
6. EXHIBIT 6 - DEVELOPMENT PLAN .....	11
7. EXHIBIT 7 - CITY ZONING MAP .....	12
8. EXHIBIT 8 - SOIL MAP .....	13
9. EXHIBIT 9 - FLOOD INSURANCE RATE MAP .....	15

## SECTION 1 - PROJECT DESCRIPTION

### 1.1 PURPOSE OF PROPOSED ACTION

The City & County of Honolulu, Board of Water Supply (BWS) is proposing to construct a 36-inch transmission main along Salt Lake Boulevard from Maluna Street to Ala Lilikoi, in the vicinity of TMK: 1-1-17, 18, 21, and 71, First District. The primary purpose of the proposed main is to provide additional transmission capacity from Pearl Harbor to Honolulu to accommodate the projected growth in Honolulu. The proposed main will also be an integral part of the Moanalua Subarea system.

The Moanalua Subarea includes Fort Shafter, Red Hill, Aliamanu, Salt Lake and the Honolulu International Airport. The Moanalua Subarea is presently serviced by nine (9) wells, six of which are private, and two (2) shafts, one of which is private. The Board of Water Supply has three (3) wells at its Moanalua Station and the Kalihi Shaft.

The existing BWS transmission system within Salt Lake Boulevard consists of one 24-inch and two 36-inch mains, one of which is only partially in place for the planned length. The proposed project will complete the 36-inch transmission system for the area. The parallel mains will ensure the continuity of service during repair activities and reduce system pressures and associated main breaks.

### 1.2 LOCATION

The proposed water main will be routed through the Salt Lake district as shown in **EXHIBIT 1 - PROJECT VICINITY MAP** and **EXHIBIT 2 - PROJECT LOCATION MAP**. The entire alignment of the new main will be in the Salt Lake Boulevard right-of-way.

### 1.3 DESCRIPTION OF THE PROPOSED ACTION

#### 1.3.1 PROPOSED ACTION

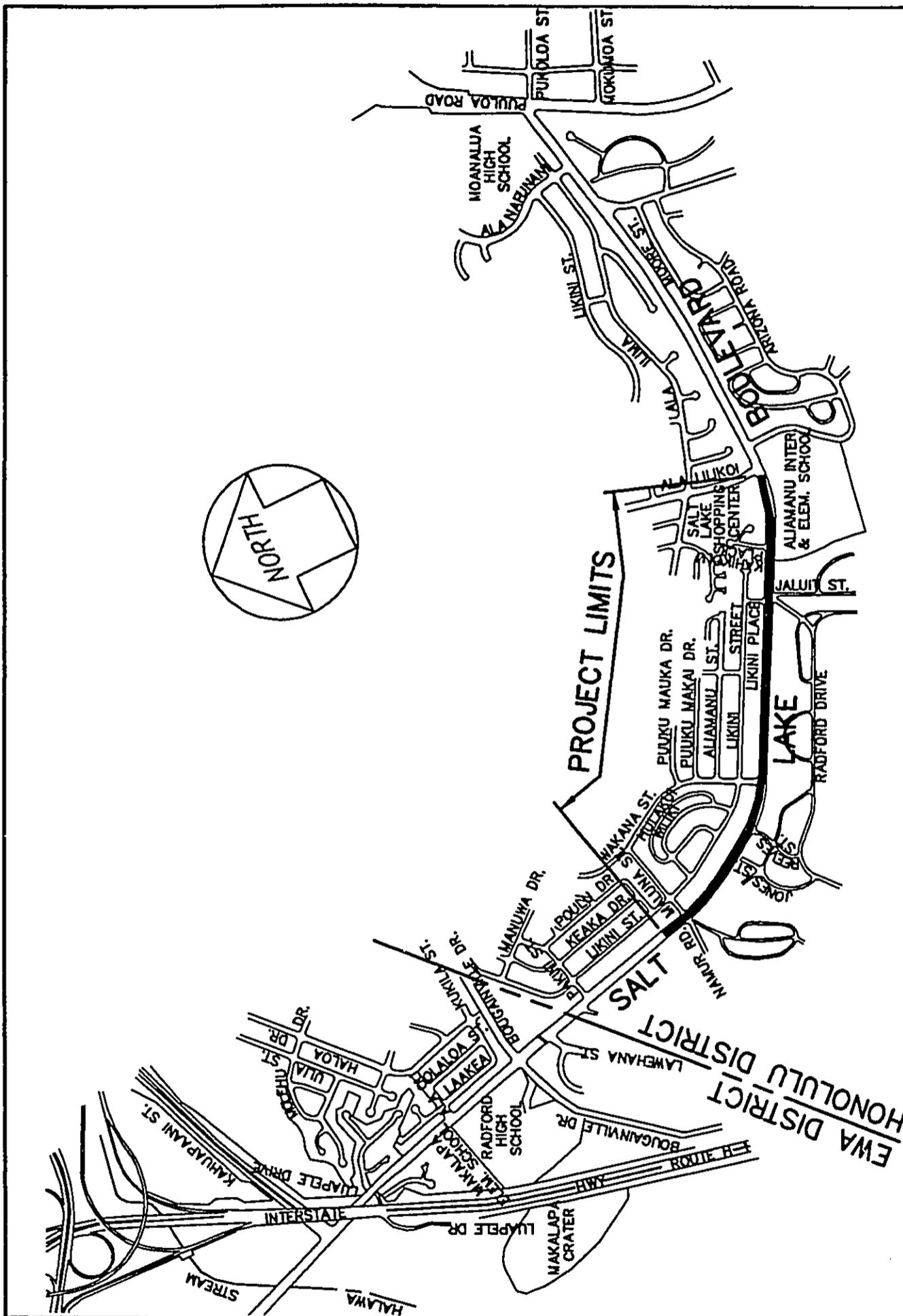
The construction of the new main will begin near the intersection of Maluna Street and Salt Lake Boulevard and extend about 4,800 linear feet easterly to near the intersection of Salt Lake Boulevard (SLB) and Ala Lilikoi (see **EXHIBIT 3 - PROPOSED SYSTEM SCHEMATIC LAYOUT**). The new main will connect to existing "stub-outs" at both ends of the project. The new main will be installed within the Salt Lake Boulevard right-of-way.

Construction will be accomplished in two separate sections as follows:

- 1) **SECTION 1** - About 1,500 linear feet of the new 36-inch main will be constructed with the Department of Public Works' (DPW) project titled "Salt Lake Boulevard Widening, Bougainville Drive to Reeves Street" which is planned for construction in 1999.



0000 0025 2637



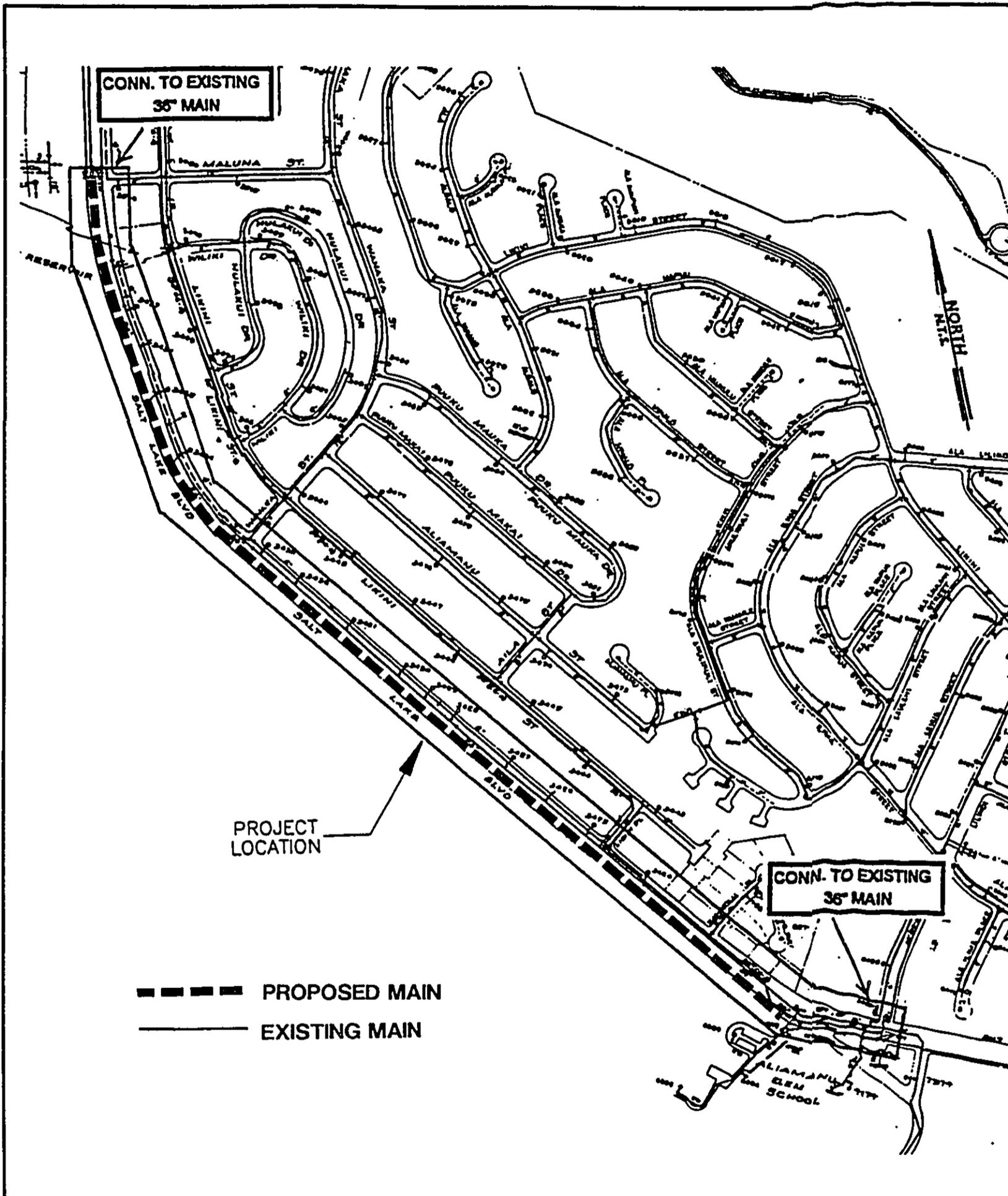
**PROJECT LOCATION MAP**

NOT TO SCALE

**PROJECT LOCATION MAP**

SALT LAKE BLVD. 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

EXHIBIT  
2



### PROPOSED SYSTEM SCHEMATIC LAYOUT

SALT LAKE BLVD. 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

EXHIBIT  
3

- 2) **SECTION 2** - The remaining 3,300 linear feet of the new 36-inch main will be constructed in one of the following scenarios:
- a) With the DPW's future SLB widening project from Reeves Street to Ala Lilikoi; or
  - b) As a separate BWS project.

The construction of the SECTION 1 will more than likely be completed prior to the start of construction for SECTION 2.

The selected scenario for the implementation of the remaining 3,300 linear feet of the new 36-inch main will depend on the timing of the DPW future Salt Lake Boulevard widening project. If schedules between the DPW and BWS projects cannot be coordinated, the second scenario described above will likely be selected.

### 1.3.2 PERMITS, COORDINATION AND APPROVALS REQUIRED

Permits anticipated for the proposed action are as follows:

- o Dept. of Public Works - For work within road right of way and discharge of hydrotesting, disinfection and flushing water into the existing storm sewer system.
- o State Dept. of Health - National Pollutant Discharge Elimination System (NPDES) General Permit for disposal of hydrotesting, disinfection and flushing water into state waters.

Coordination of the construction plans will be required with the following entities:

- o Dept. of Public Works, City & County of Honolulu
- o Dept. of Wastewater Management, City & County of Honolulu
- o Dept. of Transportation Services, City & County of Honolulu
- o Fire Department, City & County of Honolulu
- o Commission on Persons with Disabilities
- o Hawaiian Electric Company
- o GTE Hawaiian Telephone Company
- o Oceanic Cable Television
- o AT&T
- o Chevron Oil Company
- o BHP, The Gas Company

Approval of the construction plans will be required by the following agencies:

- o Dept. of Public Works, City & County of Honolulu
- o Dept. of Wastewater Management, City & County of Honolulu
- o Dept. of Transportation Services, City & County of Honolulu
- o Fire Department, City & County of Honolulu

### 1.3.3 CONSTRUCTION MATERIALS AND METHODS

The proposed water main will be bid with two alternate pipe material types as follows: 1) concrete cylinder pipe (CCP) or 2) poly-wrapped ductile iron pipe. The material type will be determined during the bid process, as proposed by the selected bidder.

Butterfly valves will be installed at intervals along the length of the water main to facilitate operation, maintenance, and repair. The main will be installed at varying depths to avoid existing utilities. A maximum depth of 8 feet will be maintained as much as possible. A typical trench section in accordance with the BWS design standards is shown in **EXHIBIT 4 - TYPICAL TRENCH & PAVEMENT RESTORATION DETAILS**.

If the new main is installed with the Salt Lake Boulevard widening project, the trenching and installation will be coordinated with the final paving to eliminate the need for pavement restoration.

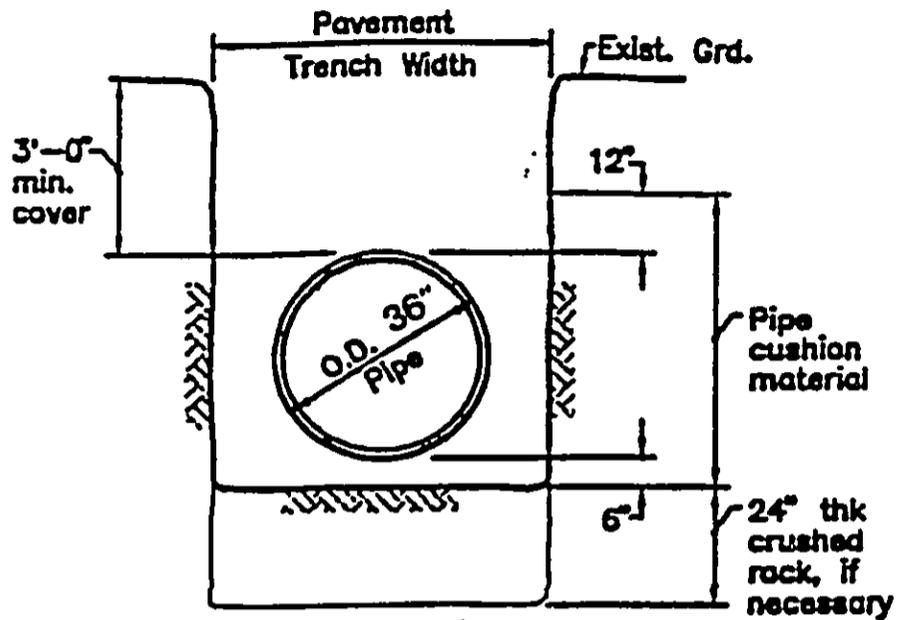
Installation procedures will include removal of pavement, trench excavation, bedding and pipe placement, backfilling & compaction, embankment work, and pavement restoration. Roadway trenches will be about 4'-6" wide. The length of open trench at any one time will be limited to facilitate traffic control during construction. The contractor shall also be responsible for the disposal of unsuitable or unused material. Excavated material will not be stockpiled along the side of the trench, but shall be removed from the site and later returned by the contractor during the backfilling activities. This will mitigate potential siltation problems generated by the project.

It is not anticipated that ground water will be encountered during excavation. However, if it becomes necessary to pump storm water out of any segment of trench, the water will be collected and properly disposed of to preclude the necessity of an NPDES permit.

If any contaminated soil is encountered (by fuel oil, etc.) during the trench excavation, proper authorities and entities will be contacted for proper handling and disposal.

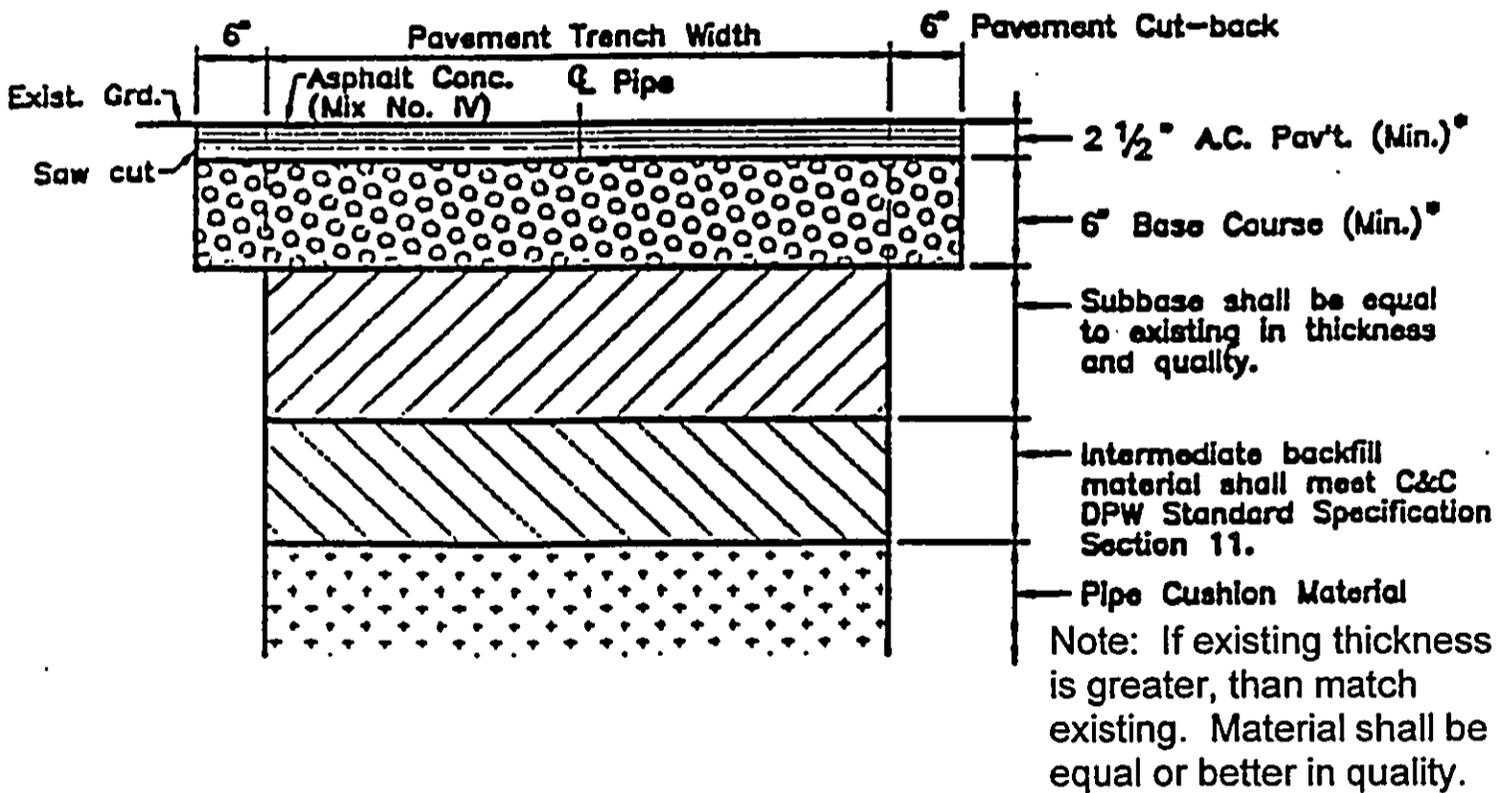
As the new transmission main will be incrementally installed, each increment will be hydrotested and disinfected. After the main is hydrostatically tested for leaks and approved, the pipe will then be disinfected with a chlorine solution, which will be disposed of in the partially dug trench for the subsequent increment. Hydrotesting water for the last increment will be collected and trucked away for disposal. This disposal procedure will eliminate the requirement of an NPDES permit for this project.

Traffic control and other activities concerning traffic impacts are discussed in **SECTION 2.13 - ROADWAYS AND TRAFFIC**.



**TYPICAL TRENCH DETAIL**

Not To Scale



**TYPICAL PAVEMENT RESTORATION DETAIL**

Not To Scale

**TYPICAL TRENCH & PAVEMENT RESTORATION DETAILS**

SALT LAKE BLVD. 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

EXHIBIT  
4

0000 0025 2642

#### 1.4 ESTIMATED CONSTRUCTION SCHEDULE AND COST

The entire 4,800 linear feet project is estimated at \$5.26 million and will be funded entirely by the Board of Water Supply, City & County of Honolulu.

The first segment from Maluna Street to Reeves Street is scheduled for construction in 1999, together with the Salt Lake Boulevard Widening project.

The implementation of the second and final segment from Reeves Street to Ala Lilikoi Street is not yet determined. However, it should immediately follow the completion of the first segment as a continuation, although basically independent of DPW's final widening schedule.

## SECTION 2 - AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATIVE MEASURES

### 2.1 EXISTING LAND USE

The area of the proposed project is classified as "Urban" by the State Land Use Commission, as shown in **EXHIBIT 5 - STATE LAND USE MAP**. The existing Salt Lake Boulevard 100-ft. right-of-way and designation for roadway use have been established on the Development Plans, which supplement the General Plan of the City and County of Honolulu. **EXHIBIT 6 - DEVELOPMENT PLAN** shows the majority of the abutting areas to be designated as Residential or Low Density Apartment (LDA). There are also isolated parcels designated as Public Facilities (PF), and one designated as Commercial (COML.).

The majority of the lands abutting the mauka side of Salt Lake Boulevard along the limits of the project are designated as Residential (R-5), as shown in **EXHIBIT 7 - CITY ZONING MAP**. The parcel at the mauka Salt Lake Boulevard-Ala Liliko'i Street intersection, where Salt Lake Shopping Center is located, is designated as Business (B-1). The makai side of Salt Lake Boulevard that is designated as Preservation-Military and Federal (F-1) is owned by the U.S. Navy. The area is used for their family housing facility.

#### Impact and Mitigative Measures

The installation of the proposed water main is not anticipated to hinder the existing land uses. Disruption to the residences will be temporary for the duration of the construction. The contractor will be required to maintain/provide ingress and egress to all existing driveways and public streets at all times.

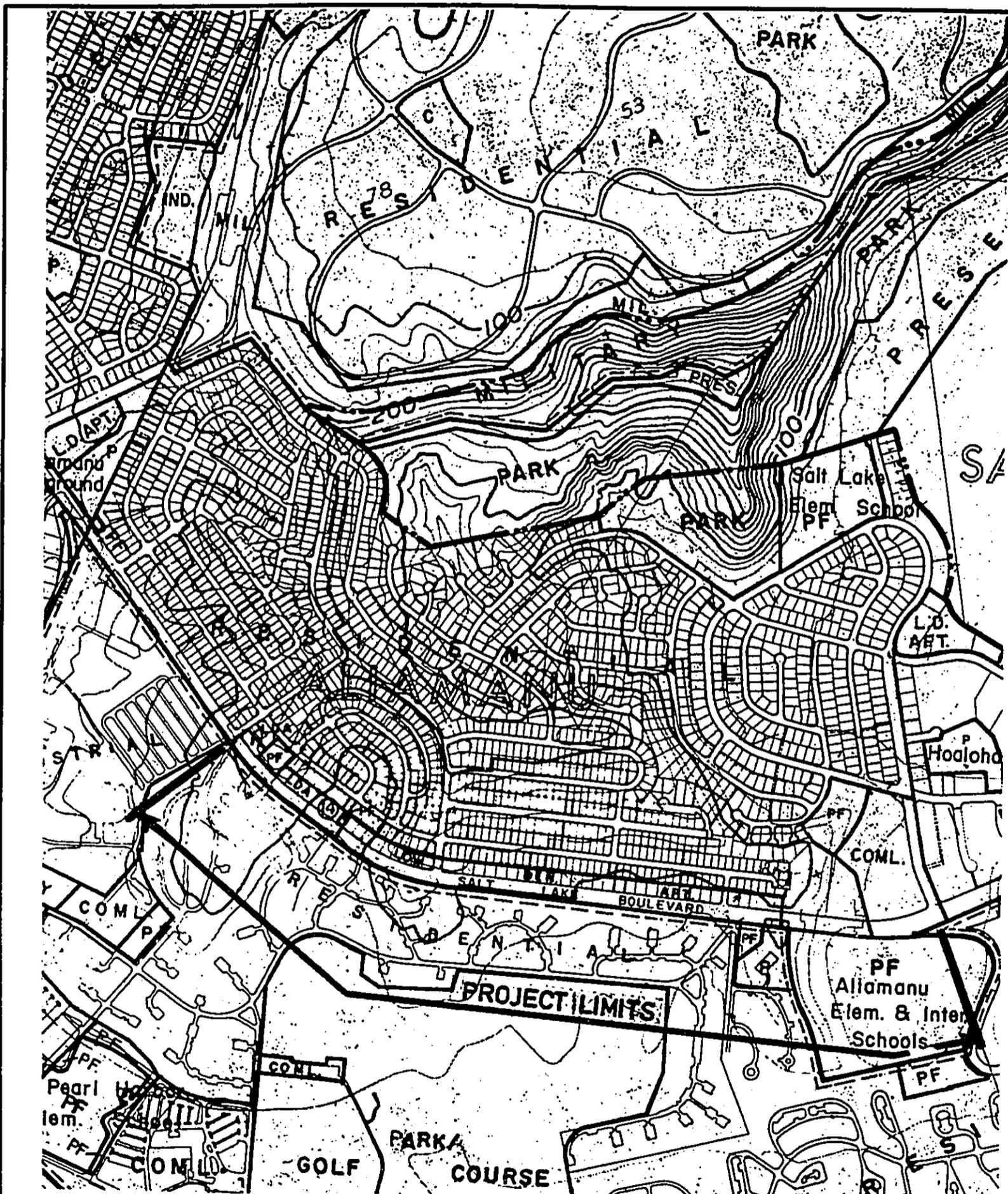
### 2.2 TOPOGRAPHY AND SOILS

The existing soils in the project area are classified as Makalapa clay, 2 - 12% slope (MdB, MdC), and Rock (rRK) by the U.S. Dept. of Agriculture, Soil Conservation Service (SCS) in "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai and Lanai, State of Hawaii, August 1972" (see **EXHIBIT 8 - SOIL MAP**).

Makalapa clay is sticky and very plastic, with a high shrink-swell potential. The permeability of this soil is slow. Runoff is described as slow at flatter slopes, and slow to medium at steeper slopes. Thus, the erosion hazard is generally slight, however, it may reach moderate levels at steeper slopes.

The soil classified as rock is made up of areas where 25 to 90 percent of the surface is covered by exposed rock, with 10 to 75 percent covered by shallow soils. The rock is typically basalt and andesite, while the associated soil is sticky and plastic.



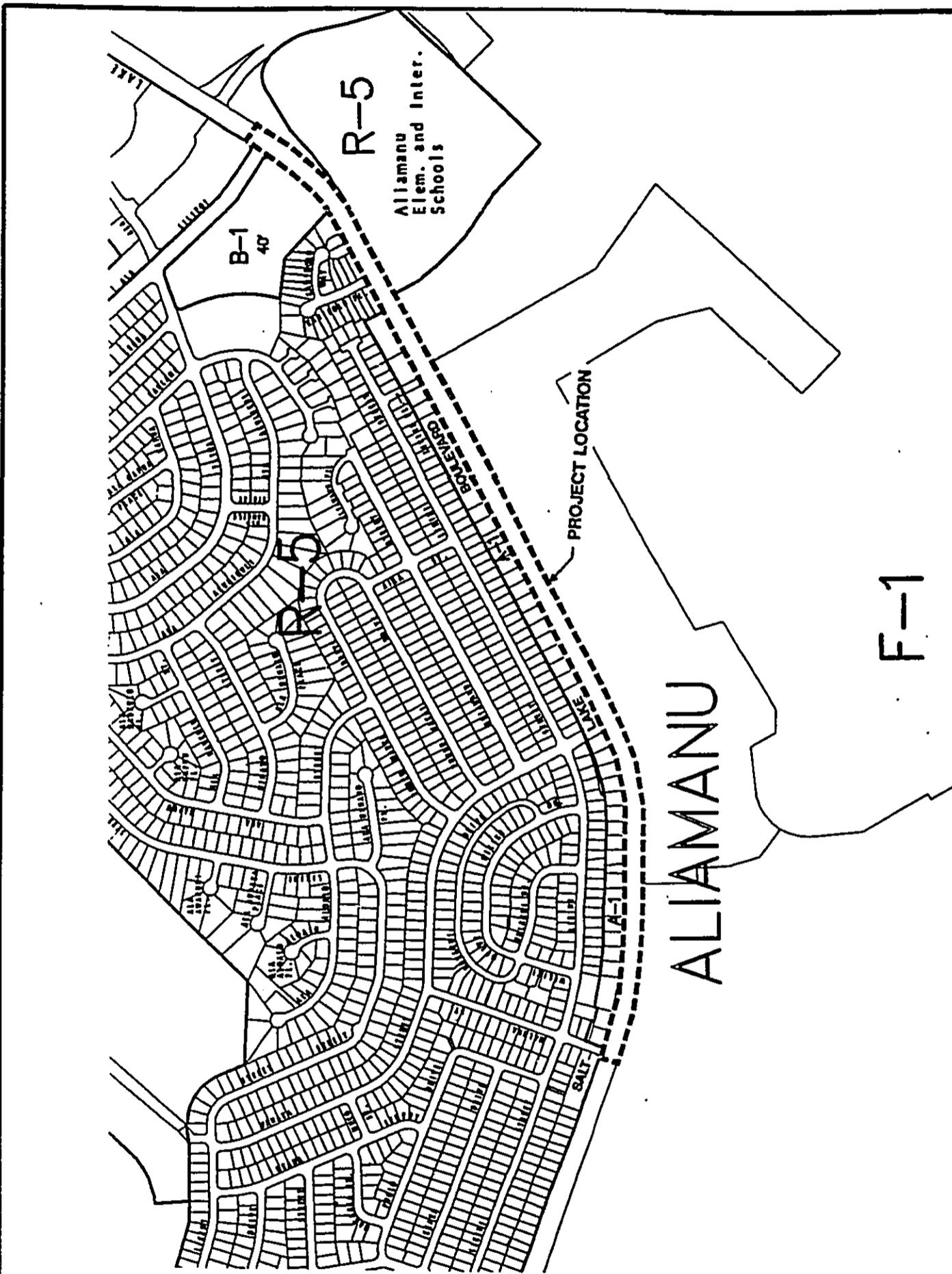


Source: Primary Urban Center Development Plan Land Use Map, 11/25/8

# DEVELOPMENT PLAN

SALT LAKE BLVD. 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

EXHIBIT  
6



Source: Current City Zoning Map (09/10/97)

# CITY ZONING MAP

SALT LAKE BLVD. 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

EXHIBIT  
7



### Impact and Mitigative Measures

No negative impacts to the topography and soils are anticipated with the installation of the proposed 36-inch water main which will be located entirely within the Salt Lake Boulevard roadway.

Disruption of soils will occur during excavation and backfill activities. Backfill material may be imported if in situ material, such as clay, is unsuitable for backfill use. The imported material for replacement of unsuitable material as well as for embankment work shall not contain any stone, rock, or concrete larger than six inches in its greatest dimension. All work shall be done in accordance with BWS standards. The placement of embankment material and pipe cushion, and replacement of the existing soil with imported material is not expected to pose any adverse conditions. Soil disturbance will be temporary and existing surface conditions will be restored upon completion of construction.

### 2.3 FLOOD ZONE DESIGNATION

The project area is designated Zone "D" according to the Flood Insurance Rate Maps (FIRM) prepared for the City and County of Honolulu by the Federal Insurance Administration. (See EXHIBIT 9 - FLOOD INSURANCE RATE MAP). A Zone "D" designation is described as "Areas of undetermined, but possible flooding."

### 2.4 SURFACE WATER

There is no surface water feature in the immediate area within the project limits.

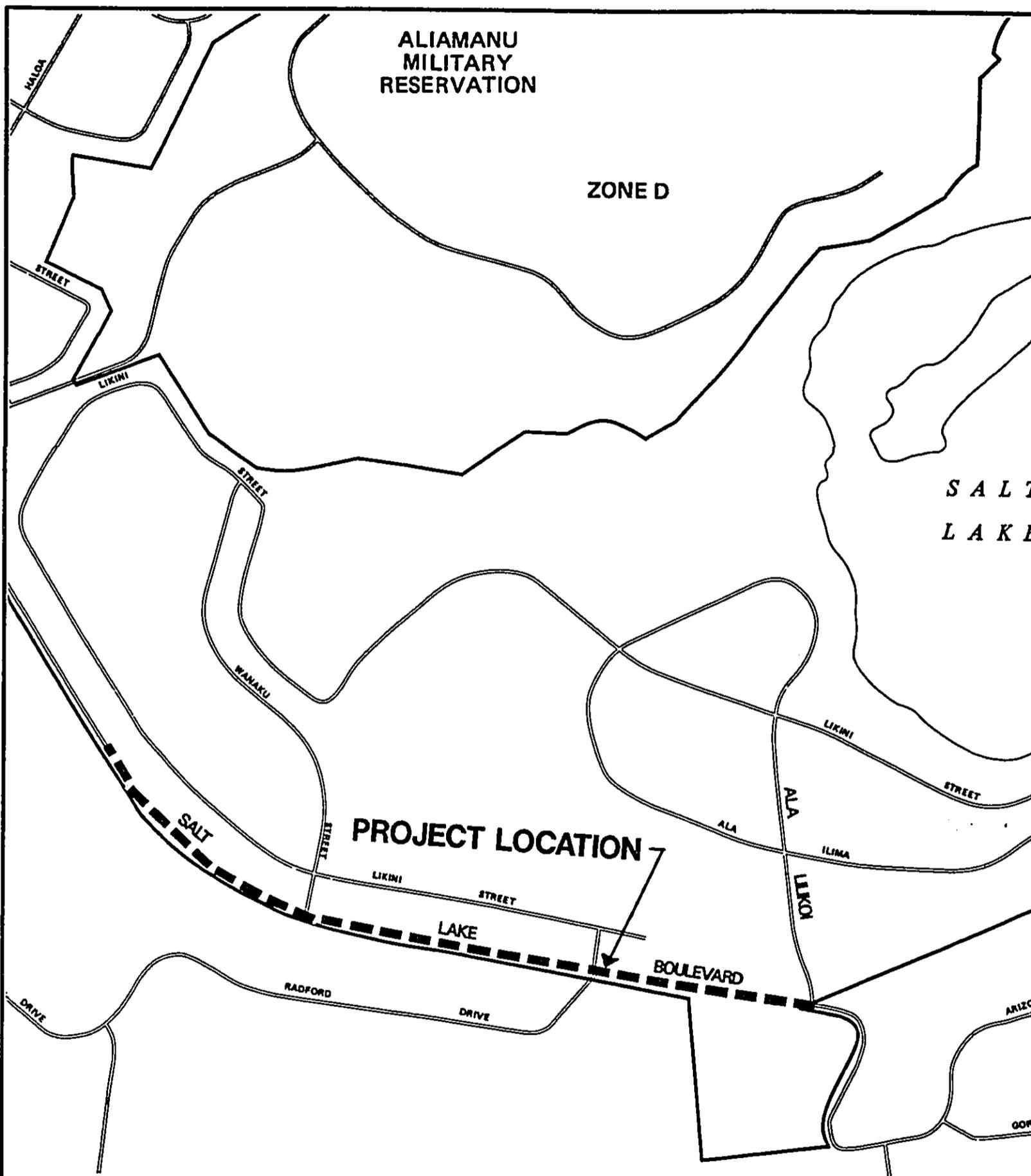
### 2.5 FLORA AND FAUNA

The vegetation at the project site are identified by the habitat classification system developed by the Jones and Stokes Association and field observation. The project area designation is Urban (Ur) which is used to describe developed areas, according to the final Environmental Impact Statement prepared for the Development of Wells, Reservoirs, Transmission Lines and Appurtenances at Honolulu, Hawaii, by Wilson Okamoto & Associates, dated 9/26/86. There are no rare or endangered wildlife species known to occur at the project sites. The Honolulu District has been extensively developed and because of this, the birds found in the area are those common to areas of urban development.

### Impact and Mitigative Measures

Impacts to flora and fauna resources are considered negligible due to the fact that the entire Salt Lake Boulevard right of way width of 100 feet has been disturbed to such an extent as the discovery of endangered resources is highly unlikely.

0000 0025 2649



Source: Flood Insurance Rate Map, Community Panel Number 150001 0115  
Federal Emergency Management Agency, 9/28/90

## FLOOD INSURANCE RATE MAP

SALT LAKE BLVD. 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

EXHIBIT  
9

## 2.6 NOISE

Ambient noise in the areas of the proposed construction are produced primarily by motor vehicular traffic. The Average Daily Traffic (ADT, 1996) for the stretch of Salt Lake Boulevard is 17,000.

Noise will be generated during construction (limited to daylight hours) of the project. Pneumatic equipment will be used along the entire length of the proposed alignment. No blasting shall be allowed.

### Impact and Mitigative Measures

The noise contributed by construction of the project may be a nuisance, however, construction presence in the area is temporary and proper maintenance of construction machines and vehicles should help to reduce unnecessary increase in noise levels.

Construction activities shall comply with the provisions of the Chapter 11-46, Hawaii Administrative Rules, "Community Noise Control."

- The contractor shall obtain a noise permit since the noise level from the construction activities are expected to exceed the allowable levels of the regulation as stated in Section 11-46-6(a).
- Construction equipment and on-site vehicles requiring an exhaust of gas or air must be equipped with mufflers as stated in Section 11-46-6(b)(1)(A).
- The contractor shall comply with the conditional use of the permit as specified in the rules and conditions issued with the permit as stated in Section 11-46-7(d)(4).

## 2.7 AIR QUALITY

Air quality in the proposed project area is mainly influenced by traffic emissions. During construction, air quality is expected to be degraded by exhaust fumes from construction equipment and automobiles congested in the area. Fugitive dust will also cause concern while trenching, backfilling, and embankment activities are performed.

### Impact and Mitigative Measures

Since the duration of work in any one location is expected to be relatively short, impacts are expected to be negligible. Proper maintenance of construction equipment will help reduce emissions.

Fugitive dust will be controlled by frequent watering of exposed dirt surfaces and immediate paving or landscaping of completed areas of construction. Open

body trucks will be covered at all times while transporting materials that may generate fugitive dust. Other types of dust controls will be implemented by the contractor as required to minimize air borne particles that may cause health problems and/or property damage. All measures utilized shall comply with the State Department of Health Administrative Rules, Title 11, Chapters 59 and 60 and all applicable City ordinances relating to excavation, embankment, and stockpiling procedures. Strict adherence to approved erosion and dust control plans is expected to minimize negative impacts.

## 2.8 RECREATION

There are no recreational facilities in the project limits, however, motorists may use Salt Lake Boulevard to travel to the parks in the surrounding area. In addition, the annual "Aloha Fun Walk & Run" held on the Presidents' Day holiday, uses a portion (Bougainville Drive to Aloha Stadium) of Salt Lake Boulevard as a part of the route for the event. The construction in the project limits will probably have very little impact on or to that route.

### Impact and Mitigative Measures

Park users who travel the project area during construction may experience inconveniences due to delays in travel time, construction related dust and noise. Public notices will be issued to inform the public of the construction period and as an advisory to select alternative routes.

The impact to the Aloha Fun Walk & Run event, although expected to be negligible, will be coordinated with the contractor. Measures to maintain the public safety, such as properly barricading open excavations, will be implemented for the duration of the event.

## 2.9 HISTORIC SITES AND ARCHAEOLOGICAL RESOURCES

According to the Final Environmental Impact Statement for Salt Lake Boulevard, Puuloa Road to Halawa Heights Road Extension, approved 02/04/77, "The State Department of Land and Natural Resources (DLNR), Division of State Parks, has indicated that there are no known natural, historic, or archaeological sites with the project right of way."

### Impact and Mitigative Measures

Should anything of potential significance, including human burials, be uncovered during the installation of the water main, all work in the area will cease. The State Historic Preservation Division, DLNR and the Oahu Island Burial Council, will then be contacted for further action.

## 2.10 AESTHETIC VALUES

There are no apparent aesthetic values along the length of the proposed project. The existing Salt Lake Boulevard is a two lane facility, primarily abutted by residences. The land between the edge of the existing two lane asphalt concrete pavement and the right of way is occupied by embankments and shrubbery. In areas fronting private properties, the land is being used for parking of private vehicles.

The Salt Lake Boulevard Widening project by the Dept. of Public Works will enhance the aesthetic value of the corridor by eliminating the blight. Furthermore, it will also provide urban uniformity within the right of way with improvements such as concrete sidewalks and possible landscaping.

#### **Impact and Mitigative Measures**

It should be noted that the normal construction activities will cause temporary visual pollution which will cease upon completion of construction activities.

### **2.11 ECONOMIC ACTIVITY**

Although there are no businesses along Salt Lake Boulevard within the limits of the proposed project, commercial activity centers are located at each end of Salt Lake Boulevard as follows:

West (Ewa) side of project limits

- o Bougainville Commercial Center (COSTCO)
- o BHP Gas Express
- o Stadium Mall
- o Kmart
- o Aloha Stadium

East (Honolulu) side of project limits

- o Salt Lake Shopping Center
- o Mapunapuna Commercial Complex

#### **Impact and Mitigative Measures**

During construction, customers of businesses in the area may experience inconveniences due to delays in travel time, construction related dust and noise. Public notices will be issued to inform the public of the construction period and as an advisory to select alternative routes to the commercial centers.

### **2.12 UTILITIES**

The new 36-inch water main is proposed to be aligned in the existing roadway where other water, sewer, gas, fuel oil, drain, electrical, telephone, cable television, and communication lines exist. The underground utilities vary in size from small service conduits to large transmission mains. The telephone and electrical power lines

primarily exist overhead.

**Impact and Mitigative Measures**

The new 36-inch water main will be designed to minimize the impact to existing utilities. Coordination with all utility companies will be done to verify existing line locations and to prevent any possible conflicts.

**2.13 ROADWAYS AND TRAFFIC**

The proposed water main will be aligned along Salt Lake Boulevard which is presently a two-lane asphalt concrete paved roadway. The Department of Public Works, City & County of Honolulu is presently in the process of widening Salt Lake Boulevard in various phases as follows:

- 1. Luapele Drive to Bougainville Drive - Construction 1996 to 1998
- 2. Bougainville Drive to Reeves Street - Design 1996 to 1998  
Construction - 1999 to 2001
- 3. Reeves Street to Ala Lilikoi - Design & Construction(Future - To be determined)

**Impact and Mitigative Measures**

Whether the 36-inch water main is constructed with the DPW Salt Lake Boulevard Widening project or not, the contractor is required to provide a minimum of two lanes of traffic (one in each direction) during construction. Temporary traffic congestion is anticipated during all phases of the construction. This is expected to cause residents, and users of the roadway to experience longer travel times. Mitigative measures include use of traffic controls during working hours, as well as adequate public notices to advise motorist to consider alternate routes and anticipate delays. Additionally, no construction will be allowed during morning and afternoon rush hours, when traffic is usually at its peak. An approved traffic control plan will be used to provide safe and efficient movement through the construction area. Construction warning signs, cones, barricades and police officers will be incorporated within this plan.

Also, to minimize the impact to traffic, BWS proposes to have the new water main installed in phases. Each phase will be completed prior to starting the next phase. The contractor will be required to take all necessary precautions to provide for the protection, convenience and safety of the public. During non-working hours, open trenches shall be covered with non-skid steel plates and all lanes shall be opened to traffic.

All work within the City & County right of way shall be accomplished within the hours of 8:30 a.m. to 3:30 p.m., Monday through Friday. If the contractor

proposes to work outside these hours, he will be required to obtain permission from the City & County Department of Transportation Services for purposes of coordination of the city's bus schedule.

#### **2.14 POLICE, FIRE AND EMERGENCY SERVICES**

No police, fire, or emergency service stations are located within the project limits. However, Salt Lake Boulevard is the only collector street serving the numerous private and Navy residences in the area. Therefore, it is assumed that currently, police, fire, and emergency vehicles travel along the project area in order to provide timely service to the public. The project should not prevent the prompt arrival of these vehicles to any location.

##### **Impact and Mitigative Measures**

Police, fire and emergency services shall be notified of the construction schedule ahead of time so their drivers can plan alternative routes to avoid the areas under construction. Fire apparatus access shall be maintained throughout the duration of the project.

#### **2.15 PUBLIC SERVICES AND FACILITIES**

Services such as sanitation/solid waste pick up and mail delivery require access to residences along the project area. Access to Aliamanu Elementary and Intermediate Schools is also located on Salt Lake Boulevard, near the project area.

##### **Impact and Mitigative Measures**

The Contractor will be required to provide access to all residences as well as the schools at all times. In addition, notices will be issued to inform the public of the construction period and as an advisory to select alternative routes. The construction activities will not prevent the performance of any service to the residences or prevent access to the schools.

## **SECTION 3 - ALTERNATIVES TO THE PROPOSED ACTION**

### **3.1 NO ACTION**

The No Action alternative is not considered feasible because it would not meet the future needs as envisioned by the planned system improvements for the area. Installation of the new 36-inch water main will provide the needed additional capacity of the transmission system from Pearl Harbor to Honolulu. It will also ensure continuity of service during maintenance and repair of the existing 36-inch and 24-inch mains.

### **3.2 ALTERNATIVE ALIGNMENTS**

No other alignments have been considered as this is a part of BWS' planned improvements of the area. The proposed project will complete the 36-inch transmission system for the area.

### **3.3 DELAYED ACTION**

Delay of the project would initially have the same effect as the "No Action" alternative. Delaying construction until a later date may result in higher costs due to inflation and would not materially alter the environmental impacts.

**SECTION 4 - AGENCIES CONSULTED**

**4.1 PRE-ASSESSMENT AGENCIES CONSULTED FOR PREPARATION OF DEA**

**4.1.1 Federal Government**

Department of the Navy, Pearl Harbor Naval Base

**4.1.2 State Government**

Dept. of Health, Environmental Management Division  
Dept. of Land & Natural Resources, Land Division  
Dept. of Land & Natural Resources, State Historic Preservation Division  
Dept. of Transportation, Highways Division  
Dept. of Accounting and General Services  
Dept. of Education (Aliamanu School)  
University of Hawaii, Environmental Center

**4.1.3 City & County Agencies**

Dept. of Land Utilization  
Dept. of Public Works  
Dept. of Transportation Services  
Dept. of Wastewater Management  
Police Department  
Fire Department  
Civil Defense  
Board of Water Supply  
Neighborhood Board No. 18  
City Councilmember Donna Kim

**4.2 DRAFT ENVIRONMENTAL ASSESSMENT CIRCULATION LIST**

**4.2.1 Federal Government**

Department of the Navy, Pearl Harbor Naval Base

**4.2.2 State Government**

Dept. of Health, Environmental Management Division  
Dept. of Land & Natural Resources, Land Division  
Dept. of Land & Natural Resources, State Historic Preservation Division  
Dept. of Transportation, Highways Division  
Dept. of Accounting and General Services  
Dept. of Education (Aliamanu School)  
University of Hawaii, Environmental Center  
Office of Environmental Quality Control

Office of Hawaiian Affairs

**4.2.3 City & County Agencies**

Dept. of Land Utilization  
Dept. of Public Works  
Dept. of Transportation Services  
Dept. of Wastewater Management  
Planning Department  
Police Department  
Fire Department  
Civil Defense  
Board of Water Supply  
Neighborhood Board No. 18  
City Councilmember Donna Kim

**4.2.4 Other Agencies**

Sierra Club

0000 0025 2658

**SECTION 5 - DETERMINATION**

A draft assessment indicates that there will not be any significant negative effect on the environment by this project. This Final Environmental Assessment is therefore submitted with "A Finding of No Significant Impact" (FONSI).

**SECTION 6 - REFERENCES**

1. Final Environmental Impact Statement for Development of Wells, Reservoirs, Transmission Lines and Appurtenances, at Honolulu, Hawaii, by Wilson Okamoto & Associates, Inc. dated 9/26/86.
2. Final Environmental Impact Statement for Salt Lake Boulevard, Puuloa Road to Halawa Heights Road (Kahuapaani St.) Extension, City & County of Honolulu, by Federal Highways Administration, State Department of Transportation, and City & County Department of Public Works, dated 2/4/77.
3. Planning Study, Salt Lake Boulevard Improvements, Kahuapaani Street to Ala Lilikoi, by Akinaka & Associates, Ltd. dated January 1993.
4. Soil Survey of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, by United States Department of Agriculture Soil Conservation Service in cooperation with the University of Hawaii Agricultural Experiment Station, August 1972.

0000 0025 2660

**APPENDIX A PRE-ASSESSMENT CONSULTATION COMMENTS**

**SALT LAKE BOULEVARD 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II**

**DRAFT ENVIRONMENTAL ASSESSMENT  
PRE-ASSESSMENT CONSULTATION COMMENTS**

11/10/97

ORGANIZATION	REPLIED BY	REPLY DATE	COMMENTS	E.A. COPY
<b>FEDERAL</b>				
Dept. of Navy, Pearl Harbor Base				
<b>STATE</b>				
Dept. of Health	Letter	07/03/96	NPDES required?	
Dept. of Land & Natural Resources Land Division	Letter	05/29/96	No comments	Yes
Dept. of Land & Natural Resources State Historic Preservation Div.	Letter	06/05/96	No known historic sites	
Dept. of Transportation, Hwy. Div.	Letter	06/24/96	No effect on State highway facilities	
Dept. of Acct. & General Services	Letter	05/14/96	No comments	
Dept. of Education (Aliamanu Sch.) University of Hawaii, Environmental Center				
<b>CITY &amp; COUNTY</b>				
Dept. of Land Utilization				
Dept. of Public Works	Letter	05/21/96	Proposed site is located in Flood Zone "D"; Implement BMPs to mitigate erosion; List permits required for effluent discharges	
Dept. of Transportation Services	Letter	06/04/96	Submit construction plans, coordinate with other projects in the area	Yes
Dept. of Wastewater Management	Letter	05/17/96	Note existing sewer lines, submit plans	
Police Department	Letter	05/23/96	No significant impact on HPD operations	
Fire Department	Letter	03/28/96	No adverse impact to HFD facilities/services	No
Civil Defense	Letter	05/23/96	No comments	
Board of Water Supply Neighborhood Board No. 18 City Councilmember Donna Kim				

0000 0025 2661

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



LAWRENCE M...  
DIRECTOR OF HEAL...

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

In reply, please refer to...

July 3, 1996

96-078/epo

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
630 South Beretania Street  
City & County of Honolulu  
Honolulu, Hawaii 96813

RECEIVED

JUL 9 1996

AKINAKA & ASSOCIATES, LTD.

Dear Mr. Usagawa:

Subject: Pre-Consultation  
Salt Lake Boulevard: 36-Inch Transmission Main  
Foster Village to Aliamanu, Phase II  
Salt Lake, Oahu  
A&A Job No. BWS96-01

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:

A National Pollutant Discharge Elimination System (NPDES) permit is required for any discharge to waters of the State, including the following:

1. Storm water discharges relating to construction activities for projects equal to or greater than five acres;
2. Storm water discharges from industrial activities;
3. Construction dewatering activities;
4. Cooling water discharges less than one million gallons;
5. Hydrotesting water.

Any person wishing to be covered by the NPDES permit for any of the above activities should file a Notice of Intent with the Department's Clean Water Branch at least 90 days prior to commencement of any discharge to waters of the State.

0000 0025 2662

Mr. Barry Usagawa  
July 3, 1996  
Page 2

96-078

Any questions regarding this matter should be directed to  
Mr. Denis Lau of the Clean Water Branch at 586-4309.

Sincerely,



BRUCE S. ANDERSON, Ph.D.  
Deputy Director for Environmental Health

c: Akinaka & Associates, Ltd. (Mr. Sheldon Yamasato) ✓  
CWB

0000 0025 2663

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
ENGINEERING BRANCH  
P O BOX 373  
HONOLULU, HAWAII 96809

MICHAEL D. WILSON, CHIEF  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY  
GILBERT COLOMA-ALONSO

AQUACULTURE DEVELOPMENT  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND RESOURCE  
ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND DIVISION  
ENGINEERING BRANCH  
PLANNING BRANCH  
TECHNICAL & SUPPORT BRANCH  
STATE PARKS  
WATER RESOURCE MANAGEMENT

May 29, 1996

RECEIVED

MAY 30 1996

AKINAKA & ASSOCIATES, LTD.

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
630 S. Beretania Street  
City & County of Honolulu  
Honolulu, Hawaii 96813

Dear Mr. Usagawa:

Salt Lake Boulevard: 36-Inch Transmission Main  
Foster Village to Aliamanu, Phase II  
Salt Lake, Oahu, Hawaii  
A&A Job No. BWS96-01

This is in reference to Akinaka & Associates' letter of May 13, 1996. Thank you for the opportunity to review the subject project.

We have no comments at this time. Please submit a copy of the Draft Environmental Assessment when it becomes available.

Should you have any questions, please contact Mr. Andrew Monden of the Engineering Branch at 587-0227.

Sincerely,

for Chief Engineer

DI:ek  
c: Akinaka & Associates

0000 0025 2664

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
STATE HISTORIC PRESERVATION DIVISION  
33 SOUTH KING STREET, 6TH FLOOR  
HONOLULU, HAWAII 96813

MICHAEL D. WILSON, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY  
GILBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
CONSERVATION AND  
ENVIRONMENTAL AFFAIRS  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
DIVISION  
LAND MANAGEMENT  
STATE PARKS  
WATER AND LAND DEVELOPMENT

June 5, 1996

RECEIVED

JUN 8 1996

AKINAKA & ASSOCIATES, LTD.

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
630 S. Beretania Street  
City & County of Honolulu  
Honolulu, Hawaii 96813

LOG NO: 17224  
DOC NO: 9605EJ29

Dear Mr. Usagawa:

**SUBJECT: Historic Preservation Review Salt Lake Boulevard: 36 inch Transmission Main, Foster Village to Aliamanu, Phase II Moanalua, Kona, O'ahu  
TMK: 1-1**

Thank you for the opportunity to comment during the preparation of an Environmental Assessment for the 36-inch Transmission Main from Foster Village to Aliamanu, Phase II along Salt Lake Boulevard. A review of our records shows that there are no known historic sites at the project location. The area has been extensively modified and developed making it unlikely that historic sites remain. Therefore, we believe that this project will have "no effect" on historic sites.

If you have any questions please call Elaine Jourdane at 587-0015.

Aloha,

Don Hibbard, Administrator  
Historic Preservation Division

EJ:jk

cc: Mr. Sheldon Yamasato, Akinaka & Associates, 250 N. Beretania St. Suite 300, Honolulu, Hawaii 96817

0000 0025 2665

BENJAMIN J. CAYETANO  
GOVERNOR



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

June 24, 1996

KAZU HAYASHIDA  
DIRECTOR

DEPUTY DIRECTORS  
JERRY M. MATSUDA  
GLENN M. OKIMOTO

IN REPLY REFER TO

HWY-PS  
2.0791

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
630 South Beretania Street  
City and County of Honolulu  
Honolulu, Hawaii 96813

RECEIVED

JUN 25 1996

AKINAKA & ASSOCIATES, LTD.

Dear Mr. Usagawa:

Subject: Preparation of Environmental Assessment, 36-Inch  
Transmission Main, Salt Lake Boulevard, Foster Village  
to Aliamanu, Phase II, Salt Lake, Oahu

Thank you for consulting with the Department of Transportation,  
Highways Division, concerning the proposed transmission main.

The proposed project will not affect our State highway  
facilities. Salt Lake Boulevard is under the City's  
jurisdiction.

Very truly yours,

A handwritten signature in black ink, appearing to read "Hugh Y. Ono".

HUGH Y. ONO  
Administrator  
Highways Division

c: Akinaka & Associates, Ltd.  
Attn: Mr. Sheldon Yamasato

0000 0025 2666

(P) 131

MAY 14 1996

RECEIVED

MAY 16 1996

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
City & County of Honolulu  
630 S. Beretania Street  
Honolulu, Hawaii 96813

AKINAKA & ASSOCIATES, LTD.

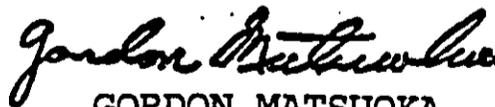
Dear Mr. Usagawa:

Subject: Salt Lake Boulevard: 36-Inch Transmission Main  
Salt Lake, Oahu, Hawaii  
Pre-Consultation Environmental Assessment

Thank you for the opportunity to provide preliminary comments on the subject project. We have no comments to offer at this time.

If there are any questions, please have your staff contact Mr. Ralph Yukumoto of the Planning Branch at 586-0488.

Very truly yours,



GORDON MATSUOKA  
State Public Work Engineer

RY:jy  
cc: Akinaka & Associates, Ltd.

0000 0025 2667

961502

DEPARTMENT OF PUBLIC WORKS  
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4341 • FAX: (808) 527-5857

PE

May 21 2 24 PM '96



KENNETH E. SPRAGUE  
DIRECTOR AND CHIEF ENGINEER

DARWIN J. HAMAMOTO  
DEPUTY DIRECTOR

ENV 96-112

JEREMY HARRIS  
MAYOR

May 21, 1996

MEMORANDUM:

TO: BARRY USAGAWA  
PLANNING BRANCH, ENVIRONMENTAL UNIT  
BOARD OF WATER SUPPLY

FROM: *for* KENNETH E. SPRAGUE  
DIRECTOR AND CHIEF ENGINEER *Alex Ho*

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (DEA)  
SALT LAKE BOULEVARD 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II  
TMK: 1-1-17: 18, 21 & 71

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

1. The proposed project site is located in Flood Zone "D".
2. The DEA should address implementation of best management practices (BMPs) during construction to mitigate erosion.
3. The DEA should also list permits required for effluent discharges.

Should you have any questions, please contact Alex Ho,  
Environmental Engineer, at 523-4150.

*JM*

0000 0025 2668

DEPARTMENT OF TRANSPORTATION SERVICES  
**CITY AND COUNTY OF HONOLULU**

PACIFIC PARK PLAZA  
711 KAPIOLANI BOULEVARD, SUITE 1200  
HONOLULU, HAWAII 96813



RECEIVED

JUN 5 1996

CHARLES O. SWANSON  
DIRECTOR

AKINAKA & ASSOCIATES, LTD.

JEREMY HARRIS  
MAYOR

June 4, 1996

5/96-2177R

MEMORANDUM

TO: BARRY USAGAWA  
PLANNING BRANCH, ENVIRONMENTAL UNIT  
BOARD OF WATER SUPPLY

FROM: CHARLES O. SWANSON, DIRECTOR

SUBJECT: SALT LAKE BOULEVARD 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE III

In response to the May 13, 1996 letter from Akinaka & Associates, we reviewed the project information provided and have the following comments to offer:

1. Construction plans, including a traffic control plan, for all work within the City's right-of-way should be submitted to this department for review and approval.
2. The scheduling of this project should be coordinated with other agencies to avoid having roadwork occur on streets in close proximity at the same time.

We look forward to receiving a copy of the draft environmental assessment for our review.

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Systems Planning Division at Local 6976.

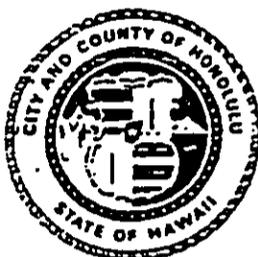
  
for CHARLES O. SWANSON

cc: Sheldon Yamasato  
Akinaka & Associates

0000 0025 2669

DEPARTMENT OF WASTEWATER MANAGEMENT  
**CITY AND COUNTY OF HONOLULU**  
650 SOUTH KING STREET  
HONOLULU, HAWAII 96813

JEREMY HARRIS  
MAYOR



RECEIVED

MAY 18 1996

AKINAKA & ASSOCIATES, LTD.

FELIX B. LIMTIACO  
DIRECTOR

CHERYL K. OKUMA-SEPI  
DEPUTY DIRECTOR

In reply refer to:  
WCC 96-57

May 17, 1996

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
630 South Beretania Street  
City and County of Honolulu  
Honolulu, Hawaii 96813

Dear Mr. Usagawa:

**Subject: Consultation of Preparation of Environmental Assessment  
Foster Village to Aliamanu, Phase II  
Salt Lake Boulevard: BWS 36-inch Transmission Main  
TMK: 1-1-17, 18, 21, 71**

In response to your letter of May 13, 1996, we have no objection to the construction of the proposed 36-inch water transmission main along Salt Lake Boulevard between Maluna Street and Ala Lilikoi Street. However, please note that there are existing sewer lines within Salt Lake Boulevard. Please submit construction plans for this project to us for our review and approval.

If you have any questions, please contact Ms. Tessa Yuen of the Service Control Branch at 523-4956.

Very truly yours,

  
FELIX B. LIMTIACO  
Director

cc: Mr. Sheldon T. Yamasato

0000 0025 2670

POLICE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

801 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111



JEREMY HARRIS  
MAYOR

MICHAEL S. NAKAMURA  
CHIEF

HAROLD M. KAWASAKI  
LEE DONOHUE  
DEPUTY CHIEFS

OUR REFERENCE BS-DL

May 23, 1996

RECEIVED

MAY 25 1996

AKINAKA & ASSOCIATES, LTD.

TO: BARRY A. USAGAWA, LONG RANGE PLANNING SECTION  
BOARD OF WATER SUPPLY

FROM: MICHAEL S. NAKAMURA, CHIEF OF POLICE  
HONOLULU POLICE DEPARTMENT

SUBJECT: CONSULTATION OF PREPARATION OF ENVIRONMENTAL ASSESSMENT  
SALT LAKE BOULEVARD: 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II  
SALT LAKE, OAHU, HAWAII  
A&A JOB NO. BWS96-01

This is in response to Mr. Sheldon T. Yamasato's letter of May 13, 1996, requesting comments concerning the subject project.

This project should have no significant impact on the operations of the Honolulu Police Department.

Thank you for the opportunity to comment.

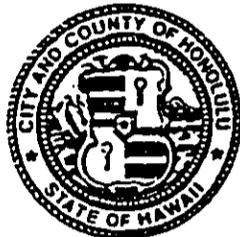
MICHAEL S. NAKAMURA  
Chief of Police

By   
EUGENE UEMURA, Assistant Chief  
Administrative Bureau

cc: ✓ Mr. Sheldon T. Yamasato  
Akinaka & Associates, Ltd.

0000 0025 2871

FIRE DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**  
3375 KOAPAKA STREET, SUITE H425  
HONOLULU, HAWAII 96819-1869



JEREMY HARRIS  
MAYOR

ANTHONY J. LOPEZ, JR.  
FIRE CHIEF

ATTILIO K. LEONARDI  
FIRE DEPUTY CHIEF

March 28, 1996

RECEIVED

MAY 31 1996

TO: MR. BARRY USAGAWA  
PLANNING BRANCH, ENVIRONMENTAL UNIT  
BOARD OF WATER SUPPLY

AKINAKA & ASSOCIATES, LTD.

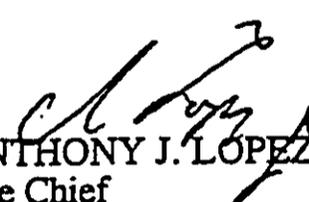
FROM: ANTHONY J. LOPEZ, JR., FIRE CHIEF

SUBJECT: SALT LAKE BOULEVARD: 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II  
SALT LAKE, OAHU, HAWAII  
A & A JOB NO. BWS96-01

We have reviewed the subject material provided and foresee no adverse impact in Fire Department facilities or services. Access for fire apparatus shall be maintained.

A copy of the draft Environmental Assessment report is not necessary.

Should you have any questions, please call Assistant Chief Arthur Ugalde of our Administrative Services Bureau at 831-7774.

  
ANTHONY J. LOPEZ, JR.  
Fire Chief

AJL/PHG:ma

cc: Akinaka & Associates (Sheldon Yamasato)

0000 0025 2672

OAHU CIVIL DEFENSE AGENCY  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813  
PHONE: 523-4121



JEREMY HARRIS  
MAYOR

JOSEPH D. REED  
ADMINISTRATOR

RECEIVED

MAY 24 1996

May 23, 1996

AKINAKA & ASSOCIATES, LTD.

MEMO TO: BARY USAGAWA, PLANNING BRANCH, ENVIRONMENTAL UNIT  
BOARD OF WATER SUPPLY

FROM: JOSEPH D. REED, ADMINISTRATOR *JDR*

SUBJECT: CONSULTATION OF PREPARATION OF ENVIRONMENTAL ASSESSMENT

Thank you for the opportunity to provide input on the Salt Lake Boulevard 36 inch Transmission Main Project, A&A Job No. BWS 96-01

We have no comments and do not have a requirement for the draft Environmental Assessment for the project at this time.

Thanks again for including us in development of this project.

cc: Akinaka & Associates Ltd

0000 0025 2673

**APPENDIX B**

**DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS AND  
RESPONSES**

0000 0025 2874

DRAFT ENVIRONMENTAL ASSESSMENT  
REVIEW COMMENTS - SUMMARY

SALT LAKE BOULEVARD 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

ORGANIZATION	REPLY DATE	COMMENTS	RESPONSE
<b>Federal Government</b>			
Dept. of the Navy	03/04/98	Keep the Navy utility corridor clear & undisturbed during construction	
<b>State Government</b>			
Dept. of Health	02/26/98	"Community Noise Control." ... Chapter 11-46 is now applied statewide.	Will revise Final EA accordingly.
Dept. of Land & Natural Resources	01/22/98	No objections	No action required
DLNR, State Historic Preservation Division	01/30/98	No effect on historic sites	No action required
Dept. of Transportation, Highways Division	01/27/98	"... will not adversely impact our State highway facilities."	No action required
Dept. of Accounting & General Services	02/10/98	No comments to offer	No action required
Office of Environmental Quality Control	01/07/98	Please discuss the existing water system in the area and the cumulative effects (local, regional and island-wide land use, population, etc.) of the proposed improvements	Will revise Final EA accordingly.
Office of Hawaiian Affairs	02/20/98	"... concurs with the mitigative measures for archaeological resources set forth in the DEA, but feels that these measures should be amended to include the immediate notification of the Oahu Island Burial Council in the event human remains are inadvertently unearthed."	Will revise Final EA accordingly.
<b>City &amp; County Agencies</b>			
Dept. of Land Utilization	01/28/98	The project is not within the Special Management Area	No action required
Dept. of Public Works	02/02/98	Revise dates cited for the Salt Lake Boulevard Widening projects	Will revise Final EA accordingly.
Dept. of Wastewater Management	01/26/98	No objections. Submit construction plans for review & approval	Submit plans for DWM review/approval
Planning Department	02/04/98	"... find the project consonant with these plans (General Plan & Development Plan) objectives and visions."	No action required
Fire Department	01/14/98	No objections to the proposed project	No action required
Civil Defense	01/22/98	No comment at this time	No action required
Neighborhood Board No. 18	03/13/98	<ol style="list-style-type: none"> <li>Is the project designed to address current needs and future needs?</li> <li>Traffic congestion due to the current Salt Lake Boulevard widening work has highlighted the need for coordinated infrastructure installation.</li> <li>If the BWS cannot wait to be done in conjunction with the Salt Lake Blvd. widening project, the NHB prefers that, to the extent feasible and practical, the water line be installed in the existing shoulders and not in the travelway. Minimizing lane closures would certainly go a long way towards gaining community support.</li> <li>What actions will be taken to minimize construction noise, as the work will be adjacent to the residential areas as well as a school? Will there be any blasting required?</li> <li>Will there be any night work? We strongly urge that this not be done.</li> </ol>	<p>Yes.</p> <p>Traffic control plans will be reviewed &amp; approved by the City prior to work. The final alignment will consider the impact on the traffic during construction.</p> <p>Project specifications will include adherence to State Dept. of Health requirements. No night time work.</p>

0000 0025 2675

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



April 2, 1998

**COPY**

JEREMY HARRIS, M.E.  
WALTER O. WATSON, JR., Chairman  
EDDIE FLORES, JR.  
KAZU HAYASHIDA  
JAN M.L.Y. AMII  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

**BROOKS H. M. YUEN, A**  
Manager and Chief Engineer

APR 8 1998

AKINAKA & ASSOCIATES, LTD.

Mr. Stanford B.C. Yuen, P.E.  
Commander  
Naval Base Pearl Harbor  
Department of the Navy  
Box 110  
Pearl Harbor, Hawaii 96860-5020

Dear Mr. Yuen:

Subject: Your Letter of March 4, 1998 Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main Project, Honolulu, Oahu

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

The proposed project should not impact the Navy utility corridor during project construction.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

**BROOKS H. M. YUEN**  
Acting Manager and Chief Engineer

cc: Sheldon T. Yamasato, Akinaka & Associates, Ltd.

0000 0025 2676



DEPARTMENT OF THE NAVY

COMMANDER  
NAVAL BASE PEARL HARBOR  
BOX 110  
PEARL HARBOR, HAWAII 96860-5020

IN REPLY REFER TO:  
5090P.1F0B  
Ser N40(23)/ 4468  
March 4, 1998

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, HI 96813

RECEIVED

MAR 6 1998

AKINAKA & ASSOCIATES, LTD

Dear Mr. Usagawa:

Subj: DRAFT ENVIRONMENTAL ASSESSMENT FOR THE SALT LAKE BOULEVARD  
36-INCH TRANSMISSION MAIN, FOSTER VILLAGE TO ALIAMANU, PHASE II,  
SALT LAKE, OAHU, HAWAII

Thank you for providing us with information on the subject proposed Salt Lake Boulevard 36-inch transmission main project. The only comment the Navy has to offer is to keep the Navy utility corridor clear and undisturbed during project construction.

If you have any questions, please feel free to contact me by phone at 474-0439 or by facsimile transmission at 474-2328. You may also direct any future correspondence on this subject to me at Commander, Naval Base Pearl Harbor, Attn: (N40), Box 110, Pearl Harbor, HI 96860-5020.

Sincerely,

A handwritten signature in cursive script, appearing to read "Stanford B. C. Yuen".

STANFORD B. C. YUEN, P.E.  
Deputy Engineer  
By direction of  
Commander, Naval Base, Pearl Harbor

Copy to:  
Mr. Sheldon Yamasato  
Akinaka and Associates, Ltd.  
250 North Beretania Street, Suite 300  
Honolulu, HI 96817

0000 0025 2677

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



March 31, 1998

**COPY**

JEREMY HARRIS, Mayor  
WALTER O. WATSON, JR., Chairman  
EDDIE FLORES, JR.  
KAZU HAYASHIDA  
JAN M.L.Y. AMII  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON  
  
RAYMOND H. SATO  
Manager and Chief Engineer

Bruce S. Anderson, Ph.D.  
Deputy Director for Environmental Health  
Department of Health  
State of Hawaii  
P. O. Box 3378  
Honolulu, Hawaii 96801

APR 7 1998  
AKINAKA & ASSOCIATES, LTD.

Dear Dr. Anderson:

Subject: Your Letter of February 26, 1998 Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main Project, Honolulu, Oahu

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that Chapter 11-43, Hawaii Administrative Rules (HAR), "Community Noise Control for Oahu" was repealed upon adoption of Chapter 11-46, HAR, "Community Noise Control." We understand that construction activities must comply with the provisions of Chapter 11-46. The Final EA will be revised accordingly.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

FOR RAYMOND H. SATO  
Manager and Chief Engineer

cc: Sheldon T. Yamasato, Akinaka & Associates, Ltd.

0000 0025 2678

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



LAWRENCE MIIKE  
DIRECTOR OF HEALTH

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

RECEIVED

In reply, please refer to:

MAR 5 1998

AKINAKA & ASSOCIATES, LTD

February 26, 1998

96-078A

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, Hawaii 96813

Dear Mr. Usagawa:

Subject: Draft Environmental Assessment (DEA)  
Salt Lake 36-Inch Transmission Main  
(A&A Job No:BWS 96-01)  
Maluna Street to Ala Lilikoi Street  
Honolulu, Hawaii

Noise, Radiation & Indoor Air Quality Branch

Chapter 11-43, Hawaii Administrative Rules, "Community Noise Control for Oahu" is referred to in the Draft Environmental Assessment. Chapter 11-43, was repealed on September 26, 1996 upon adoption of Chapter 11-46, Hawaii Administrative Rules, "Community Noise Control." Chapter 11-46 is now applied statewide.

1. Construction activities must comply with the provisions of the Chapter 11-46, Hawaii Administrative Rules, "Community Noise Control."
  - a. The contractor must obtain a noise permit since the noise level from the construction activities are expected to exceed the allowable levels of the regulation as stated in Section 11-46-6(a).
  - b. Construction equipment and on-site vehicles requiring an exhaust of gas or air must be equipped with mufflers as stated in Section 11-46-6(b) (1) (A).
  - c. The contractor must comply with the conditional use of the permit as specified in the rules and conditions issued with the permit as stated in Section 11-46-7(d) (4).

0000 0025 2679

Mr. Barry Usagawa  
February 26, 1998  
Page 2

96-078A/epo

Should there be any questions, please call Mr. Jerry Haruno,  
Environmental Health Program Manager, Noise, Radiation and Indoor  
Air Quality Branch at 586-4701.

Sincerely,



Bruce S. Anderson, Ph.D.  
Deputy Director for Environmental Health

c: NR&IAQB

0000 0025 2680

**COPY**

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



JEREMY HARRIS, Mayor  
WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

February 9, 1998

Mr. Cecil B. Santos, Oahu District  
Land Agent  
Department of Land and Natural Resources  
Land Division  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

**RECEIVED**

**FEB 12 1998**

AKINAKA & ASSOCIATES, LTD

Dear Mr. Santos:

Subject: Your Letter of January 22, 1998 Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main, Honolulu, Oahu, Hawaii

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that you have no objections to the proposed transmission main project since it will not involve any State lands.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

  
RAYMOND H. SATO  
Manager and Chief Engineer

cc: Sheldon Yamasato, Akinaka and Associates

0000 0025 2681



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809

P-51/98

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

REF LD JGD

JAN 22 1998

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
630 S. Beretania Street  
Honolulu, Hawaii 96813

Dear Mr. Usagawa:

Subject: Salt Lake Boulevard 36-Inch Transmission Main,  
Foster Village to Aliamanu, Phase II Salt Lake,  
Honolulu, Oahu TMK: 1st/ 1-1-17, 18, 21 & 71

This is in reference to your letter of January 10, 1998 requesting our review and comments. Thank you for the opportunity to review the subject project.

As per the letter of June 24, 1996 from Hugh Y. Ono, Administrator, Highways Division regarding the subject project, the project will not affect the State's Highway facilities as Salt Lake Boulevard is under the jurisdiction of the City and County. As such, the laying of the proposed transmission main will fall under the County's franchise agreement with the Board of Water Supply to resolve the land use, and no State lands are involved.

We do note that the Engineering Branch of the Land Division, as per copy of their letter of May 29, 1996 attached to the Draft Environmental Assessment (DEA), had no comments on the subject project. Additionally, the Historic Preservation Division of the this Department as per copy of their attached letter of June 5, 1996 attached to the DEA stated that the project had "no effect" on historic sites.

We also note that the installation of the proposed water main is not anticipated to hinder the existing land uses. Disruption to the residences will be temporary for the duration of the construction and the contractor will be required to maintain and provide ingress and egress to all existing driveways and public streets at all times. Impacts to flora and fauna resources are negligible as the entire Salt Lake Boulevard right of way width of 100 feet has already been disturbed to such an extent so the discovery of endangered resources is highly

PM

0000 0025 2682

COPY

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



March 17, 1998

JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
EDDIE FLORES, JR.  
KAZU HAYASHIDA  
JAN M.L.Y. AMII  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

Mr. Don Hibbard, Administrator  
State Historic Preservation Division  
Department of Land and Natural Resources  
State of Hawaii  
33 South King Street, Sixth Floor  
Honolulu, Hawaii 96813

Dear Mr. Hibbard:

Subject: Your Letter of January 30, 1998 to Akinaka & Associates, Ltd. Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main Project, Honolulu, Oahu

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that the proposed project will have "no effect" on historic sites since there are no known historic sites at the project location. Section 2.9 of the Final EA will be revised with your comments of May 1996, indicating the project will have "no effect" on historic sites.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

FOR RAYMOND H. SATO  
Manager and Chief Engineer

cc: Sheldon T., Yamasato, Akinaka & Associates, Ltd.

0000 0025 2683

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII

P



P-134798

MICHAEL D. WILSON, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

GILBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT  
PROGRAM

AQUATIC RESOURCES  
CONSERVATION AND

RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION

DIVISION  
LAND DIVISION  
STATE PARKS  
WATER AND LAND DEVELOPMENT

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

January 30, 1998

STATE HISTORIC PRESERVATION DIVISION  
33 SOUTH KING STREET, 6TH FLOOR  
HONOLULU, HAWAII 96813

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
630 S. Beretania Street  
City & County of Honolulu  
Honolulu, Hawaii 96813

LOG NO: 20955 ✓  
DOC NO: 9801EJ16

Dear Mr. Usagawa:

**SUBJECT: Chapter 6E-8 Historic Preservation Review -- Draft Environmental Assessment (EA) Salt Lake Boulevard: 36 Inch Transmission Main, Foster Village to Aliamanu Phase II Moanalua, Kona, O'ahu TMK: 1-1**

We commented to Akinaka & Associates during the preparation of the EA on this project in May of 1996 (Log 17224/Doc. 9605EJ29). Our comments consisted of the following:

Thank you for the opportunity to comment during the preparation of an Environmental Assessment for the 36-inch Transmission Main from Foster Village to Aliamanu, Phase II along Salt Lake Boulevard. A review of our records shows that there are no known historic sites at the project location. The area has been extensively modified and developed making it unlikely that historic sites remain. Therefore, we believe that this project will have "no effect" on historic sites.

Section 2.9 of the DEA cites approval for the FEIS Salt Lake Boulevard, Puuloa Road to Halawa Heights Road Extension, dated Feb. 1977 as a reference for historic sites. This should be updated with our comments of May 1996 which are included in Appendix A of the DEA.

If you have any questions please call Elaine Jourdane at 587-0015.

Aloha

Don Hibbard, Administrator  
Historic Preservation Division

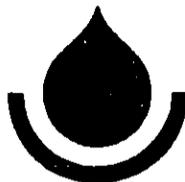
EJ:jk

c: Mr. Sheldon Yamasato, Akinaka & Associates, 250 N. Beretania St. Suite 300, Honolulu, Hawaii 96817

0000 0025 2684

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



February 9, 1998

**COPY**

JEREMY HARRIS, Mayor  
WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

Mr. Kazu Hayashida, Director  
Department of Transportation  
State of Hawaii  
869 Punchbowl Street  
Honolulu, Hawaii 96813

**RECEIVED**

**FEB 12 1998**

AKINAKA & ASSOCIATES, LTD

Dear Mr. Hayashida: 

Subject: Your Letter of January 27, 1998 Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main, Honolulu, Oahu, Hawaii

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that the proposed project will not adversely impact any State highway facilities.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

  
RAYMOND H. SATO  
Manager and Chief Engineer

cc: Sheldon Yamasato, Akinaka and Associates

0000 0025 2685

BENJAMIN J. CAYETANO  
GOVERNOR



P-54/98

KAZU HAYASHIDA  
DIRECTOR

DEPUTY DIRECTORS  
BRIAN K. MINAII  
GLENN M. OKIMOTO

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

HWY-PS  
2.7861

JAN 27 1998

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
City and County of Honolulu  
630 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Usagawa:

Subject: Draft Environmental Assessment  
Salt Lake 36-inch Transmission Main  
Maluna Street to Ala Liliko'i Street

Thank you for your consultant's transmittal of January 10, 1998, regarding the above subject.

The proposed installation of a 36-inch water transmission main in Salt Lake Boulevard from Maluna Street to Ala Liliko'i Street will not adversely impact our State highway facilities.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Kazu Hayashida".

KAZU HAYASHIDA  
Director of Transportation

c: Mr. Sheldon T. Yamasato  
Vice President  
Akinaka & Associates, Ltd.  
250 North Beretania Street, Suite 300  
Honolulu, Hawaii 96817

DC WA TT S 67 MB

A small, handwritten mark or signature in the bottom right corner of the page.

0000 0025 2686

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



February 18, 1998

**COPY**

JEREMY HARRIS, Mayor  
WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

Mr. Gordon Matsuoka  
Public Works Administrator  
Department of Accounting  
and General Services  
State of Hawaii  
P. O. Box 119  
Honolulu, Hawaii 96810

RECEIVED

FEB 19 1998

AKINAKA & ASSOCIATES, LTD

Dear Mr. Matsuoka:

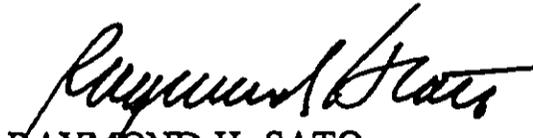
Subject: Your Letter of February 10, 1998 Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main Project, Honolulu, Oahu

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that you have no comments on the proposed project.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

  
RAYMOND H. SATO  
Manager and Chief Engineer

cc: Sheldon T. Yamasato, Akinaka & Associates, Ltd.

0000 0025 2687



BENJAMIN J. CAYETANO  
GOVERNOR

STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES  
P.O. BOX 119, HONOLULU, HAWAII 96810

LETTER NO. (P) 1065

FEB 10 1998

Mr. Barry Usagawa  
Planning Branch, Environmental Unit  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, Hawaii 96813

Dear Mr. Usagawa:

Subject: Draft Environmental Assessment  
Salt Lake 36-Inch Transmission Main  
Maluna Street to Ala Lilikoi Street  
A&A Job No.: BWS 96-01

Thank you for the opportunity to review the subject document.  
We have no comments to offer.

If there are any questions, please have your staff contact  
Mr. Ronald Ching of the Planning Branch at 586-0490.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gordon Matsuoka".

GORDON MATSUOKA  
Public Works Administrator

RC:jk  
c: Akinaka & Associates, Ltd.

0000 0025 2688

COPY

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



February 5, 1998

JEREMY HARRIS, Mayor  
WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

RECEIVED

FEB 10 1998

AKINAKA & ASSOCIATES, LTD

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

Dear Mr. Gill:

Subject: Your Letter of January 7, 1998 Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main Project, Honolulu, Oahu, Hawaii

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Salt Lake Boulevard 36-inch transmission main project.

The Final EA will be revised to include a discussion on the existing water system and the cumulative effects of the proposed improvements. The primary purpose of the proposed main is to provide additional transmission capacity from Pearl Harbor to Honolulu to accommodate the projected growth in Honolulu. Increasing transmission capacity with parallel mains ensures continuity of service during repair activities and reduces system pressures and their associated main breaks.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

  
RAYMOND H. SATO  
Manager and Chief Engineer

cc: Sheldon Yamasato, Akinaka and Associates, Ltd.

0000 0025 2689

BENJAMIN J. CAYETANO  
GOVERNOR



GARY GILL  
DIRECTOR

STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

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

January 7, 1997

Mr. Barry Usagawa  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, Hawai'i 96843

Dear Mr. Usagawa:

The Office of Environmental Quality Control (OEQC) submits for your response the following comments on a draft environmental assessment (DEA) entitled "Salt Lake Boulevard 36-Inch Transmission Main: Foster Village to Aliamanu, Phase II."

1. **CUMULATIVE EFFECTS:** Please discuss the existing water system in the area and the cumulative effects (on local, regional and island-wide land use, population, etc.) of the proposed improvements.

Please include a copy of this letter and your response for their inclusion in the final environmental assessment and notice of determination on this project.

If there are any questions regarding this letter, please call Les Segundo of my staff at 586-4185. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Gill".

GARY GILL  
Director of Environmental Quality Control

c: Mr. Sheldon Yamasato, Akinaka & Associates, Ltd.

0000 0025 2690

# CORRECTION

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

0000 0025 2691

BENJAMIN J. CAYETANO  
GOVERNOR



GARY GILL  
DIRECTOR

STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

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

January 7, 1997

Mr. Barry Usagawa  
Board of Water Supply  
City and County of Honolulu  
630 South Beretania Street  
Honolulu, Hawai'i 96843

Dear Mr. Usagawa:

The Office of Environmental Quality Control (OEQC) submits for your response the following comments on a draft environmental assessment (DEA) entitled "Salt Lake Boulevard 36-Inch Transmission Main: Foster Village to Aliamanu, Phase II."

1. **CUMULATIVE EFFECTS:** Please discuss the existing water system in the area and the cumulative effects (on local, regional and island-wide land use, population, etc.) of the proposed improvements.

Please include a copy of this letter and your response for their inclusion in the final environmental assessment and notice of determination on this project.

If there are any questions regarding this letter, please call Les Segundo of my staff at 586-4185. Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary Gill".

GARY GILL  
Director of Environmental Quality Control

c: Mr. Sheldon Yamasato, Akinaka & Associates, Ltd.

0000 0025 2692

COPY

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



March 17, 1998

JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
EDDIE FLORES, JR.  
KAZU HAYASHIDA  
JAN M.L.Y. AMII  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

RECEIVED

MAR 18 1998

AKINAKA & ASSOCIATES, LTD

Mr. Randall Ogata, Administrator  
Office of Hawaiian Affairs  
State of Hawaii  
711 Kapiolani Boulevard, Suite 500  
Honolulu, Hawaii 96813-5249

Dear Mr. Ogata:

Subject: Your Letter of February 20, 1998 to Akinaka & Associates, Ltd. Regarding the Draft Environmental Assessment for the Proposed Salt Lake Boulevard 36-Inch Transmission Main Project, Honolulu, Oahu

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Salt Lake Boulevard 36-inch transmission main project.

The Final EA, Section 2.9 will be revised to include the notification of the Oahu Island Burial Council in the event human remains are inadvertently unearthed.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

FOR RAYMOND H. SATO  
Manager and Chief Engineer

cc: Sheldon T. Yamasato, Akinaka & Associates, Ltd.

0000 0025 2693

PHONE (808) 594-1888

FAX (808) 594-1865



P-119/98

**STATE OF HAWAII**  
**OFFICE OF HAWAIIAN AFFAIRS**  
711 KAPI'OLANI BOULEVARD, SUITE 500  
HONOLULU, HAWAII 96813

February 20, 1998

Sheldon T. Yamasato  
Akinaka & Associates, Ltd.  
250 N. Beretania St., Suite 300  
Honolulu, HI 96817

DOC NO.: EIS-130

FEB 25 3 49 PM '98

**Subject: Draft Environmental Assessment for the Salt Lake 36-inch Transmission Main, Island of Oahu**

Dear Mr. Yamasato:

Thank you very much for the opportunity to review the above-referenced Draft Environmental Assessment (DEA). The City and County of Honolulu, Board of Water Supply (BWS) is proposing to construct a 36-inch transmission main along Salt Lake Boulevard from Maluna Street to Ala Lilikoi. The new main will be approximately 4,800 feet in length and will be installed within the Salt Lake Boulevard right of way.

The Office of Hawaiian Affairs (OHA) has some concerns with the existence of human burials within the area. It may be unlikely that burials will be encountered, because of the previously disturbed condition of the site, and the proposed alignment of the transmission main with existing underground utilities. Nonetheless, due to the subsurface nature of the proposed project the possibility of encountering burials remains. OHA concurs with the mitigative measures for archaeological resources set forth in the DEA, but feels that these measures should be amended to include the immediate notification of the Oahu Island Burial Council in the event human remains are inadvertently unearthed.

If you have any questions or comments regarding this matter please contact Colin Kippen, Land and Natural Resources Division Officer, or Richard Stook, EIS Planner at 594-1755.

Sincerely yours,

Randall Ogata  
Administrator

  
for Colin Kippen, Officer  
Land and Natural Resources

cc: Raymond Sato, Board of Water Supply  
Barry Usagawa, Board of Water Supply  
Board of Trustees

0000 0025 2694

COPY

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

February 9, 1998

RECEIVED

FEB 12 1998

AKINAKA & ASSOCIATES, LTD

TO: JAN NAOE SULLIVAN, DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

FROM: *Raymond H. Sato*  
RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM OF JANUARY 28, 1998 REGARDING THE  
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED  
SALT LAKE BOULEVARD 36-INCH TRANSMISSION MAIN PROJECT

Thank you for reviewing the Draft EA for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that the proposed project is not within the Special Management Area.

If you have any questions, please contact Barry Usagawa at 527-5235.

cc: Sheldon Yamasato, Akinaka and Associates

0000 0025 2695

P

980326

FE

RECEIVED  
BD OF WATER SUPPLY

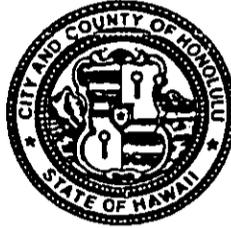
DEPARTMENT OF LAND UTILIZATION

CITY AND COUNTY OF HONOLULU

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

JAN 28 4 37 PM '98

JEREMY HARRIS  
MAYOR



JAN NAOE SULLIVAN  
DIRECTOR

LORETTA K.C. CHEE  
DEPUTY DIRECTOR

98-00331 (DT)

'98 EA Comments Zone 1

January 28, 1998

MEMORANDUM

TO: RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

ATTN: BARRY USAGAWA

FROM: JAN NAOE SULLIVAN, DIRECTOR  
DEPARTMENT OF LAND UTILIZATION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (DEA), SALT LAKE BOULEVARD  
36-INCH TRANSMISSION MAIN, FOSTER VILLAGE TO ALIAMANU  
TAX MAP KEYS: 1-1-17, 18, 21, AND 71

We have reviewed the above-referenced DEA and have no comments to offer at this time. The project is not within the Special Management Area.

Should you have any questions, please contact the Environmental Review Branch at 523-4077.

JAN NAOE SULLIVAN  
Director of Land Utilization

JNS:am

cc: Akinaka & Associates, Ltd.  
(Sheldon T. Yamasato)

g:ppd\9800331.djt

0000 0025 2696

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



March 13, 1998

**COPY**

JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
EDDIE FLORES, JR.  
KAZU HAYASHIDA  
JAN M.L.Y. AMII  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

**RECEIVED**

**MAR 13 1998**

AKINAKA & ASSOCIATES, LTD.

TO: JONATHAN K. SHIMADA, Ph.D., DIRECTOR AND CHIEF ENGINEER  
DEPARTMENT OF PUBLIC WORKS

FROM: ~~FOR~~ *[Signature]* RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 2, 1998 REGARDING THE  
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SALT  
LAKE BOULEVARD 36-INCH TRANSMISSION MAIN PROJECT

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed Salt Lake Boulevard 36-inch transmission main project.

The Final EA will be revised to incorporate your comments.

If you have any questions, please contact Barry Usagawa at 527-5235.

cc: Sheldon Yamasato, Akinaka and Associates

0000 0025 2697

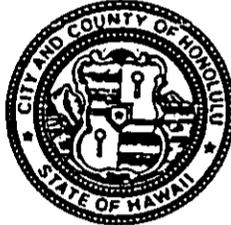
DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**  
BD OF WATER SUPPLY  
650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4341 • FAX: (808) 527-5857

98043

PE

FEB 4 3 25 PM '98

JEREMY HARRIS  
MAYOR



JONATHAN K. SHIMADA  
DIRECTOR AND CHIEF ENGINEER

IN REPLY REFER TO

98-10-002

February 2, 1998

MEMORANDUM

**TO:** MR. RAYMOND SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

**ATTN:** MR. BARRY USAGAWA, PLANNING BRANCH

**FROM:** *for* DR. JONATHAN K. SHIMADA, DIRECTOR AND CHIEF ENGINEER  
DEPARTMENT OF PUBLIC WORKS

**SUBJECT:** DRAFT ENVIRONMENTAL ASSESSMENT FOR SALT LAKE BOULEVARD  
36-INCH TRANSMISSION MAIN MALUNA STREET TO ALA LILIKOI STREET,  
A&A JOB NO.: BWS 96-01

We have noted our comments on the attached sheets.

Should you have any questions, please call Richard Suzuki at extension 5059.

Attach.

cc/attach: Akinaka & Associates, Ltd.

**SECTION 1 - PROJECT DESCRIPTION**

**1.1 PURPOSE OF PROPOSED ACTION**

The City & County of Honolulu, Board of Water Supply (BWS) is proposing to construct a 36-inch transmission main along Salt Lake Boulevard from Maluna Street to Ala Lilikoi, in the vicinity of TMK: 1-1-17, 18, 21, and 71, First District. The primary purpose of the proposed main is to provide additional transmission capacity from Pearl Harbor to Honolulu. The proposed main will also be an integral part of the Moanalua Subarea system, and will ensure continuity of service during maintenance and repair of the... existing transmission mains.

The Moanalua Subarea includes Fort Shafter, Red Hill, Aliamanu, Salt Lake and the Honolulu International Airport. The Moanalua Subarea is presently serviced by nine (9) wells, six of which are private, and two (2) shafts, one of which is private. The Board of Water Supply has three (3) wells at its Moanalua Station and the Kalihi Shaft.

The existing BWS transmission system within Salt Lake Boulevard consists of one 24-inch and two 36-inch mains, one of which is only partially in place for the planned length. The proposed project will complete the 36-inch transmission system for the area.

**1.2 LOCATION**

The proposed water main will be routed through the Salt Lake district as shown in **EXHIBIT 1 - PROJECT VICINITY MAP** and **EXHIBIT 2 - PROJECT LOCATION MAP**. The entire alignment of the new main will be in the Salt Lake Boulevard right-of-way.

**1.3 DESCRIPTION OF THE PROPOSED ACTION**

**1.3.1 PROPOSED ACTION**

The construction of the new main will begin near the intersection of Maluna Street and Salt Lake Boulevard and extend about 4,800 linear feet easterly to near the intersection of Salt Lake Boulevard (SLB) and Ala Lilikoi (see **EXHIBIT 3 - PROPOSED SYSTEM SCHEMATIC LAYOUT**). The new main will connect to existing "stub-outs" at both ends of the project. The new main will be installed within the Salt Lake Boulevard right-of-way.

Construction will be accomplished in two separate sections as follows:

- 1) **SECTION 1** - About 1,500 linear feet of the new 36-inch main will be constructed with the Department of Public Works' (DPW) project titled "Salt Lake Boulevard Widening, Bougainville Drive to Reeves Street" which is planned for construction in 1997 1999

*separate project*

**1.3.3 CONSTRUCTION MATERIALS AND METHODS**

The proposed water main will be bid with two alternate pipe material types as follows: 1) concrete cylinder pipe (CCP) or 2) poly-wrapped ductile iron pipe. The material type will be determined during the bid process, as proposed by the selected bidder.

Butterfly valves will be installed at intervals along the length of the water main to facilitate operation, maintenance, and repair. The main will be installed at varying depths to avoid existing utilities. A maximum depth of 8 feet will be maintained as much as possible. A typical trench section in accordance with the BWS design standards is shown in **EXHIBIT 4 - TYPICAL TRENCH & PAVEMENT RESTORATION DETAILS**.

If the new main is installed with the Salt Lake Boulevard widening project, the trenching and installation will be coordinated with the final paving to eliminate the need for pavement restoration.

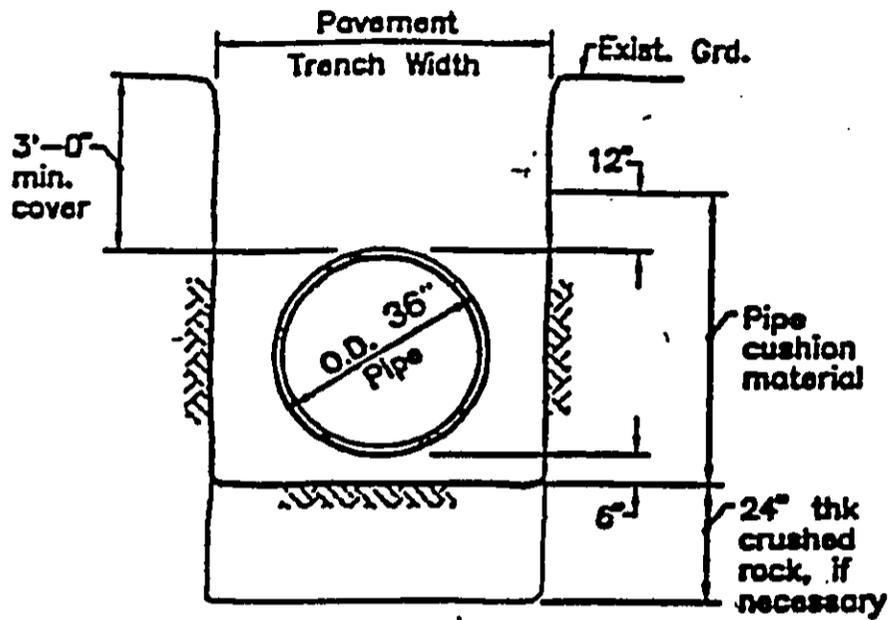
Installation procedures will include removal of pavement, trench excavation, bedding and pipe placement, backfilling & compaction, embankment work, and pavement restoration. Roadway trenches will be about 4'-6" wide. The length of open trench at any one time will be limited to facilitate traffic control during construction. The contractor shall also be responsible for the disposal of unsuitable or unused material. Excavated material will not be stockpiled along the side of the trench, but shall be removed from the site and later returned by the contractor during the backfilling activities. This will mitigate potential siltation problems generated by the project.

It is not anticipated that ground water will be encountered during excavation. However, if it becomes necessary to pump storm water out of any segment of trench, the water will be collected and properly disposed of to preclude the necessity of an NPDES permit.

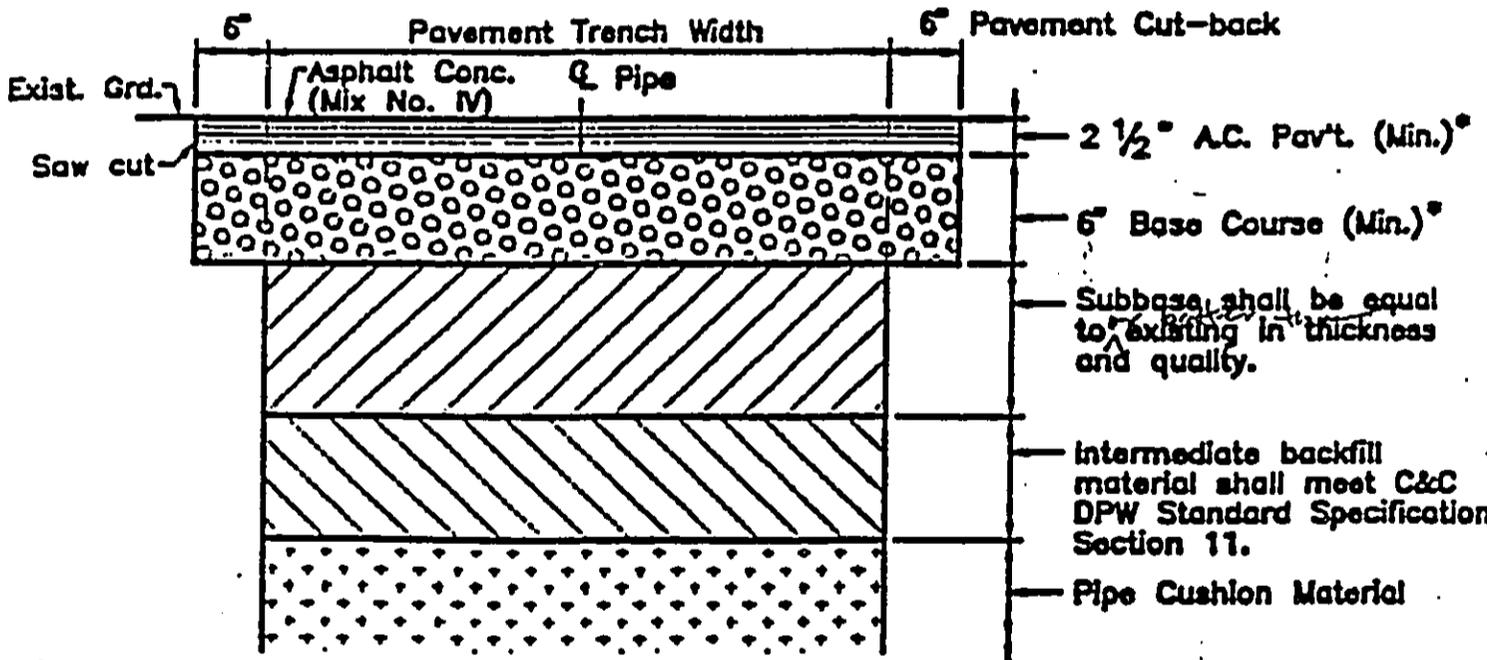
As the new transmission main will be incrementally installed, each increment will be hydrotested and disinfected. After the main is hydrostatically tested for leaks and approved, the pipe will then be disinfected with a chlorine solution, which will be disposed of in the partially dug trench for the subsequent increment. Hydrotesting water for the last increment will be collected and trucked away for disposal. This disposal procedure will eliminate the requirement of an NPDES permit for this project.

Traffic control and other activities concerning traffic impacts are discussed in **SECTION 2.13 - ROADWAYS AND TRAFFIC**.

*old reports  
by [unclear]  
on [unclear]  
is [unclear]*



**TYPICAL TRENCH DETAIL**  
Not To Scale



\*Note: If existing thickness is greater, then match existing. Material shall be equal or better.

**TYPICAL PAVEMENT RESTORATION DETAIL**  
Not To Scale

**TYPICAL TRENCH & PAVEMENT RESTORATION DETAIL**

SALT LAKE BLVD. 36-INCH TRANSMISSION MAIN  
FOSTER VILLAGE TO ALIAMANU, PHASE II

EXHIBIT  
4

**1.4 ESTIMATED CONSTRUCTION SCHEDULE AND COST**

The entire 4,800 linear feet project is estimated at \$5.26 million and will be funded entirely by the Board of Water Supply, City & County of Honolulu.

The first segment from Maluna Street to Reeves Street is scheduled for construction in ~~1997~~, together with the Salt Lake Boulevard Widening project.  
1999

The implementation of the second and final segment from Reeves Street to Ala Liliroi Street is not yet determined. However, it should immediately follow the completion of the first segment as a continuation, although basically independent of DPW's final widening schedule.

## 2.8 RECREATION

There are no recreational facilities in the project limits, however, motorists may use Salt Lake Boulevard to travel to the parks in the surrounding area. In addition, the annual "Aloha Fun Walk & Run" held on the Presidents' Day holiday, uses a portion (Bougainville Drive to Aloha Stadium) of Salt Lake Boulevard as a part of the route for the event. The construction in the project limits will probably have very little impact on or to that route.

### Impact and Mitigative Measures

Park users who travel the project area during construction may experience inconveniences due to delays in travel time, construction related dust and noise. Public notices will be issued to inform the public of the construction period and as an advisory to select alternative routes.

The impact to the Aloha Fun Walk & Run event, although expected to be negligible, will be coordinated with the contractor. Measures to maintain the public safety, such as properly barricading open excavations, will be implemented for the duration of the event.

## 2.9 HISTORIC SITES AND ARCHAEOLOGICAL RESOURCES

According to the Final Environmental Impact Statement for Salt Lake Boulevard, Puuloa Road to Halawa Heights Road Extension, approved 02/04/77, "The State Department of Land and Natural Resources (DLNR), Division of State Parks, has indicated that there are no known natural, historic, or archaeological sites with the project right of way."

### Impact and Mitigative Measures

Should anything of potential significance, including human burials, be uncovered during the installation of the water main, all work in the area will cease. The State Historic Preservation Division, DLNR, will then be contacted for further action.

## 2.10 AESTHETIC VALUES

There are no apparent aesthetic values along the length of the proposed project. The existing Salt Lake Boulevard is a two lane facility, primarily abutted by residences. The land between the edge of the existing two lane asphalt concrete pavement and the right of way is occupied by embankments and shrubbery. In areas fronting private properties, the land is being used for parking of private vehicles.

The Salt Lake Boulevard Widening project by the Dépt. of Public Works will enhance the aesthetic value of the corridor by eliminating the blight. Furthermore, it will also

provide urban uniformity within the right of way with improvements such as concrete sidewalks and possible landscaping.

**Impact and Mitigative Measures**

It should be noted that the normal construction activities will cause temporary visual pollution which will cease upon completion of construction activities.

**2.11 ECONOMIC ACTIVITY**

Although there are no businesses<sup>62</sup> along Salt Lake Boulevard within the limits of the proposed project, commercial activity centers are located at each end of Salt Lake Boulevard as follows:

West (Ewa) side of project limits

- o Bougainville Commercial Center (COSTCO)
- o BHP Gas Express
- o Stadium Mall
- o Kmart
- o Aloha Stadium

East (Honolulu) side of project limits

- o Salt Lake Shopping Center
- o Mapunapuna Commercial Complex

**Impact and Mitigative Measures**

During construction, customers of businesses in the area may experience inconveniences due to delays in travel time, construction related dust and noise. Public notices will be issued to inform the public of the construction period and as an advisory to select alternative routes to the commercial centers.

**2.12 UTILITIES**

The new 36-inch water main is proposed to be aligned in the existing roadway where other water, sewer, gas, fuel oil, drain, electrical, telephone, cable television, and communication lines exist. The underground utilities vary in size from small service conduits to large transmission mains. The telephone and electrical power lines primarily exist overhead.

**Impact and Mitigative Measures**

The new 36-inch water main will be designed to minimize the impact to existing utilities. Coordination with all utility companies will be done to verify existing line locations and to prevent any possible conflicts.

### 2.13 ROADWAYS AND TRAFFIC

The proposed water main will be aligned along Salt Lake Boulevard which is presently a two-lane asphalt concrete paved roadway. The Department of Public Works, City & County of Honolulu is presently in the process of widening Salt Lake Boulevard in various phases as follows:

- 1. Luapele Drive to Bougainville Drive - Construction 1996 to 1998
- 2. Bougainville Drive to Reeves Street - Design 1996 to <sup>1998</sup>~~1997~~  
Construction - 1997 to 1999
- 3. Reeves Street to Ala Lilikoi - Design & Construction (Future -  
To be determined) <sup>1999 2001</sup>

#### Impact and Mitigative Measures

Whether the 36-inch water main is constructed with the DPW Salt Lake Boulevard Widening project or not, the contractor is required to provide a minimum of two lanes of traffic (one in each direction) during construction. Temporary traffic congestion is anticipated during all phases of the construction. This is expected to cause residents, and users of the roadway to experience longer travel times. Mitigative measures include use of traffic controls during working hours, as well as adequate public notices to advise motorists to consider alternate routes and anticipate delays. Additionally, no construction will be allowed during morning and afternoon rush hours, when traffic is usually at its peak. An approved traffic control plan will be used to provide safe and efficient movement through the construction area. Construction warning signs, cones, barricades and police officers will be incorporated within this plan.

Also, to minimize the impact to traffic, BWS proposes to have the new water main installed in phases. Each phase will be completed prior to starting the next phase. The contractor will be required to take all necessary precautions to provide for the protection, convenience and safety of the public. During non-working hours, open trenches shall be covered with non-skid steel plates and all lanes shall be opened to traffic.

All work within the City & County right of way shall be accomplished within the hours of 8:30 a.m. to 3:30 p.m., Monday through Friday. If the contractor proposes to work outside these hours, he will be required to obtain permission from the City & County Department of Transportation Services for purposes of coordination of the city's bus schedule.

0000 0025 2705

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



February 25, 1998

**COPY**

JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

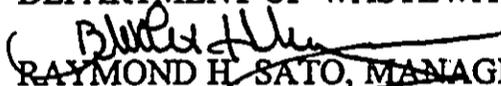
RAYMOND H. SATO  
Manager and Chief Engineer

RECEIVED

MAR 5 1998

AKINAKA & ASSOCIATES, LTD

TO: KENNETH E. SPRAGUE, DIRECTOR  
DEPARTMENT OF WASTEWATER MANAGEMENT

FROM: **FOR**  RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM OF JANUARY 26, 1998 REGARDING THE DRAFT  
ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SALT LAKE  
BOULEVARD 36-INCH TRANSMISSION MAIN PROJECT

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that you have no objections to the proposed project. We note that there are existing sewer lines within the project limits. Construction plans will be submitted for your review and approval upon completion.

If you have any questions, please contact Barry Usagawa at 527-5235.

cc: Sheldon Yamasato, Akinaka and Associates

0000 0025 2706

DEPARTMENT OF WASTEWATER MANAGEMENT  
**CITY AND COUNTY OF HONOLULU**

P-70/98

650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 527-6663 • FAX: (808) 527-6675

JEREMY HARRIS  
MAYOR



KENNETH E. SPRAGUE, P.E., Ph.D.  
DIRECTOR

CHERYL K. OKUMA-SEPE, ESQ.  
DEPUTY DIRECTOR

In reply refer to:  
WCC 98-17

January 26, 1998

**MEMORANDUM**

TO: MR. BARRY USAGAWA  
PLANNING BRANCH, ENVIRONMENTAL UNIT  
BOARD OF WATER SUPPLY

FROM: KENNETH E. SPRAGUE, DIRECTOR *CKO*  
DEPARTMENT OF WASTEWATER MANAGEMENT

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT  
SALT LAKE BOULEVARD 36-INCH TRANSMISSION MAIN  
MALUNA STREET TO ALA LILIKOI STREET  
TMK: 1-1-17, 18, 21, 71

In response to your letter of January 10, 1998, we have no objection to the construction of the proposed 36-inch water transmission main along Salt Lake Boulevard between Maluna Street and Ala Lilikoi Street. However, please note that there are existing sewer lines within the project limits. Please submit construction plans for this project to us for our review and approval.

If you have any questions, please contact Ms. Tessa Ching of the Service Control Branch at 523-4956.

cc: Mr. Sheldon T. Yamasato (Akinaka & Associates, Ltd.)

*A*

0000 0025 2707

COPY

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
EDDIE FLORES, JR.  
KAZU HAYASHIDA  
JAN M.L.Y. AMII  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

March 18, 1998

RECEIVED

MAR 24 1998

AKINAKA & ASSOCIATES, LTD

TO: PATRICK T. ONISHI, CHIEF PLANNING OFFICER  
PLANNING DEPARTMENT

FROM: *Raymond H. Sato*  
FOR RAYMOND H. SATO, ~~MANAGER~~ AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 4, 1998 REGARDING THE  
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SALT  
LAKE BOULEVARD 36-INCH TRANSMISSION MAIN PROJECT

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that the proposed project is consistent with the objectives and visions of the General Plan and Development Plan.

If you have any questions, please contact Barry Usagawa at 527-5235.

cc: Sheldon Yamasato, Akinaka and Associates

0000 0025 2708

PLANNING DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

P-133/98

650 SOUTH KING STREET, 8TH FLOOR • HONOLULU, HAWAII 96813-3017  
PHONE: (808) 523-4711 • FAX: (808) 523-4950



JEREMY HARRIS  
MAYOR

PATRICK T. ONISHI  
CHIEF PLANNING OFFICER

DONA L. HANAIKE  
DEPUTY CHIEF PLANNING OFFICER

RR 1/98-0052

February 4, 1998

TO: RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

ATTN: BARRY USAGAWA  
PLANNING BRANCH, ENVIRONMENTAL UNIT

FROM: PATRICK T. ONISHI *[Signature]*  
CHIEF PLANNING OFFICER

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT, SALT LAKE BOULEVARD  
36-INCH TRANSMISSION MAIN: MALUNA STREET TO ALA LILIKOI  
STREET - FOSTER VILLAGE TO ALIAMANU, PHASE II

We are responding to your letter dated January 10, 1998 requesting comments on the above Draft Environmental Assessment. We have reviewed the report with regards to the proposed project's General Plan and Development Plan for the Primary Urban Center impacts and find the project consonant with these Plans' objectives and visions.

Should you have any questions, please contact Robert Reed of our staff at 523-4402.

PTO:lh

c: Akinaka & Associates, Ltd.

Mar 2 2 16 PM '98

0000 0025 2709

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



February 6, 1998

**COPY**

JEREMY HARRIS, Mayor  
WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

RECEIVED

FEB 10 1998

AKINAKA & ASSOCIATES, LTD

TO: ANTHONY J. LOPEZ, JR., FIRE CHIEF  
FIRE DEPARTMENT

FROM: *Block H*  
FOR RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM OF JANUARY 14, 1998 REGARDING THE  
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SALT  
LAKE BOULEVARD 36-INCH TRANSMISSION MAIN PROJECT,  
HONOLULU, OAHU

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that you have no objections to the proposed project.

If you have any questions, please contact Barry Usagawa at 527-5235.

cc: Sheldon T. Yamasato, Akinaka & Associates, Ltd.

0000 0025 27 10

980219

PE

RECEIVED  
BD. OF WATER SUPPLY

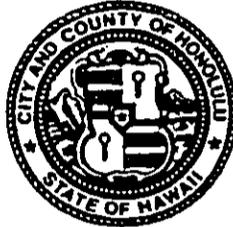
JAN 21 2 58 PM '98

JEREMY HARRIS  
MAYOR

FIRE DEPARTMENT

**CITY AND COUNTY OF HONOLULU**

3375 KOAPAKA STREET, SUITE H425  
HONOLULU, HAWAII 96819-1869



ANTHONY J. LOPEZ, JR.  
FIRE CHIEF

ATTILIO K. LEONARDI  
FIRE DEPUTY CHIEF

January 14, 1998

TO: RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

ATTN: BARRY USAGAWA  
PLANNING BRANCH, ENVIRONMENTAL UNIT

FROM: ANTHONY J. LOPEZ, JR., FIRE CHIEF

SUBJECT: SALT LAKE 36-INCH TRANSMISSION MAIN  
MALUNA ST. TO ALA LILIKOI ST.  
A&A JOB NO: BWS 96-01  
HFD INTERNAL NO. 98-013

We have reviewed the correspondence dated January 10, 1998, received from Sheldon T. Yamasato of Akinaka & Associates, Ltd. and have no objections to the continued use of the comments in paragraph 2.14 Police, Fire and Emergency Services.

Should you have any questions, please call Battalion Chief Charles Wassman of our Fire Prevention Bureau at 831-7778.

ANTHONY J. LOPEZ, JR.  
Fire Chief

AJL:mpn

cc: Sheldon T. Yamasato, Akinaka & Associates, Ltd.

0000 0025 2711

**COPY**

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



JEREMY HARRIS, Mayor  
WALTER O. WATSON, JR., Chairman  
MAURICE H. YAMASATO, Vice Chairman  
KAZU HAYASHIDA  
MELISSA Y.J. LUM  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

RAYMOND H. SATO  
Manager and Chief Engineer

February 6, 1998

RECEIVED

FEB 10 1998

AKINAKA & ASSOCIATES, LTD

TO: JOSEPH D. REED, ADMINISTRATOR  
OAHU CIVIL DEFENSE AGENCY

FROM: *Raymond H. Sato*  
FOR RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER  
BOARD OF WATER SUPPLY

SUBJECT: YOUR MEMORANDUM OF JANUARY 22, 1998 REGARDING THE  
DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED SALT  
LAKE BOULEVARD 36-INCH TRANSMISSION MAIN PROJECT,  
HONOLULU, OAHU

Thank you for reviewing the Draft Environmental Assessment for the proposed Salt Lake Boulevard 36-inch transmission main project.

We acknowledge that you have no comments at this time.

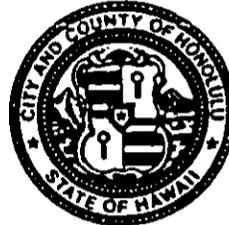
If you have any questions, please contact Barry Usagawa at 527-5235.

cc: Sheldon T. Yamasato, Akinaka & Associates, Ltd.

0000 0025 27 12

OAHU CIVIL DEFENSE AGENCY  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET  
HONOLULU, HAWAII 96813  
PHONE: 523-4121



JEREMY HARRIS  
MAYOR

JOSEPH D. REED  
ADMINISTRATOR

January 22, 1998

MEMO TO: BARRY USAGAWA, PLANNING BRANCH  
ENVIRONMENTAL UNIT  
BOARD OF WATER SUPPLY

FROM: JOSEPH D. REED, ADMINISTRATOR *JDR.*

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT

Thank you for the opportunity to review the Draft Environmental Assessment for Project: Salt Lake 36-Inch Transmission Main, Maluna St. to Ala Liliko'i St., A&A Job No: BWS 96-01.

This Agency has no comments on the draft at this time.

JDR:ms

cc: Mr. Shelton T. Yamasato  
Aikinaka & Associates, Ltd.

0000 0025 27 13

COPY

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HAWAII 96843  
PHONE (808) 527-6180  
FAX (808) 533-2714



April 15, 1998

JEREMY HARRIS, Mayor

WALTER O. WATSON, JR., Chairman  
EDDIE FLORES, JR.  
KAZU HAYASHIDA  
JAN M.L.Y. AMII  
FORREST C. MURPHY  
JONATHAN K. SHIMADA, PhD  
BARBARA KIM STANTON

BROOKS H. M. YUEN, A  
Manager and Chief Engineer

Mr. Mark Taylor, Chairperson  
Aliamanu/Salt Lake/Foster Village  
Neighborhood Board No. 18  
c/o Neighborhood Commission  
City Hall, Room 400  
Honolulu, Hawaii 96813

RECEIVED  
APR 25 1998

AKINAKA & ASSOCIATES, LTD.

Dear Mr. Taylor:

Subject: Your Letter of March 13, 1998 Regarding the Draft Environmental Assessment for Board of Water Supply's Proposed 36-Inch Water Main Along Salt Lake Boulevard, from Maluna Street to Ala Liliko'i Street

Thank you for reviewing the Draft Environmental Assessment (EA) for the proposed water transmission main. We have the following reply to the comments in your letter, and your concerns from our presentation to the Neighborhood Board on February 12, 1998:

1. Purpose and Need

The proposed Salt Lake Boulevard 36-inch water main will increase the transmission capacity for moving water from existing and future Pearl Harbor area well stations into the Honolulu area. The additional capacity will enable the Board of Water Supply (BWS) to meet current and future demands from Moanalua to Hawaii Kai. The current water demand in Honolulu has increased by 10 million gallons per day (mgd) since 1980 to 1997 (75 - 85 mgd). The future demand in the year 2020 is projected to increase by an additional 18 mgd (85 - 103 mgd).

The additional transmission capacity will increase our ability to lower operating costs for transmitting water by reducing pumping costs. Also, the reliability of water service will be enhanced by decreasing the chance of water main breaks.

The proposed Salt Lake Boulevard transmission main is one of three remaining segments for providing water transmission capacity from Waipahu into Honolulu. The other two remaining segments are along Moanalua Road and Dillingham Boulevard, both scheduled for construction this year, 1998.



0000 0025 27 15

# CORRECTION

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

0000 0025 27 16



Mr. Mark Taylor  
Page 2  
April 15, 1998

The Waipahu to Honolulu transmission project has been scheduled for construction since the 1970's. The first phase of the Salt Lake Boulevard segment was completed in 1980. The other segments of the project that have been completed from Waipahu to Honolulu are along Farrington Highway, Moanalua Road, Salt Lake Boulevard, Puuloa Road, Kamehameha Highway, and Dillingham Boulevard.

## 2. Construction

We have sent a memorandum to the Department of Public Works (DPW) to confirm our previous discussions with them on proceeding separately with the construction of our water main. If DPW can confirm that the roadway improvements will be constructed in 1999, we will then adjust our construction schedule to start with DPW's construction. If not, we plan to proceed separately in June 1999. We are still awaiting their reply to our memorandum.

The traffic control plans will be submitted to the County's Department of Transportation Services for review and approval prior to beginning construction. Two lanes of traffic will remain open to accommodate the construction.

## 3. Alignment

The alignment of the main may have to be located in the roadway to avoid relocating fuel lines and trees, and to minimize excavation problems. Two lanes of traffic should still be available for the entire project with this alignment, with temporary routing of traffic along some shoulder areas of Salt Lake Boulevard. We looked at alternative alignments, locating the pipeline in the makai shoulder area and a combination of both, on and off the roadway, but concluded that the most feasible alignment is within the roadway for the reasons noted above.

0000 0025 27 17



Mr. Mark Taylor  
Page 3  
April 15, 1998

4. Noise

The proposed project must comply with the provisions of the Hawaii Administrative Rules (HAR), Chapter 11-46, "Community Noise Control", which includes obtaining a noise permit if noise levels exceed the allowable levels of the HAR. The project specifications will reflect this. Work around schools will be done when school is not in session. In addition, blasting will not be required during construction.

5. Night Work

There will be no night work performed during construction. The contractor's working hours will be limited between 7:30 a.m. to 3:30 p.m., unless as approved by BWS.

We plan to schedule a meeting with residents within the project limits to obtain their comments before we start the design phase of the project.

If you have any questions, please contact Herbert Minakami at 527-6183.

Very truly yours,

BROOKS H. M. YUEN  
Acting Manager and Chief Engineer

cc: Councilmember Donna Kim  
Sheldon Yamasato, Akinaka and Associates

0000 0025 27 18

9809



PC

RECEIVED  
ALIAMANU / SALT LAKE / FOSTER VILLAGE NEIGHBORHOOD BOARD NO. 18

c/o NEIGHBORHOOD COMMISSION • CITY HALL, ROOM 400 • HONOLULU, HAWAII 96813

March 13, 1998

4 16 1 02 PM '98

MAR 16 1998

PE  
cc: Mar  
Dep

Mr. Raymond Sato, Manager and  
Chief Engineer  
Board of Water Supply  
630 S. Beretania Street  
Honolulu, HI 96813

Attn: Planning Branch, Environmental Unit

Dear Mr. Sato:

SUBJECT: Draft Environmental Assessment - Salt Lake 36-Inch Transmission Main  
Mahua Street to Ala Lili'oi Street  
A&A Job No. BWS 96-01

The Aliamanu/Salt Lake/Foster Village Neighborhood Board, upon review of the subject Draft EA, offers the following comments and questions:

1. Purpose and Need. The Draft EA only addresses what is being proposed and not why this project is needed. Is the project designed to address current needs or future needs?
2. Construction. As explained in the attached letter from the Department of Public Works, construction of Phase II of the Salt Lake Boulevard widening project, from Bougainville Drive to Reeves Street, is scheduled to take place from early 1999 to late 2000. Also, Phase III of the Salt Lake Boulevard widening project, from Reeves Street to Ala Lili'oi Street, is scheduled to take place from mid-2001 to mid-2003. Inasmuch as the locations of these projects overlap the location of the proposed BWS project, the Neighborhood Board strongly urges that the BWS project be done in conjunction with the Salt Lake Boulevard widening. Traffic congestion due to current Salt Lake Boulevard widening work has highlighted the need for coordinated infrastructure installation.
3. Alignment. If the BWS project cannot wait to be done in conjunction with the Salt Lake Boulevard widening project, the Neighborhood Board prefers that, to the extent feasible and practical, the water line be installed in the existing shoulders and not in the travelway. Minimizing lane closures would certainly go a long way towards gaining community support.
4. Noise. What actions will be taken to minimize construction noise, as the work will be adjacent to residential areas as well as a school? Will there be any blasting required?
5. Night Work. Will there be any night work? We would strongly urge that this not be done.

Thank you for the opportunity to comment. We further appreciate your staff coming to our February meeting and making a presentation on this project.

Sincerely,

*Mark Taylor*  
Mark Taylor, Chair

Cc: N.B. 18 Members  
Walter Watson, Chair, Board of Water Supply  
Sheldon Yamasato, Akinaga & Associates  
Jonathan K. Shimada, Director and Chief Engineer, Department of Public Works  
Councilmember Donna Mercado Kim  
Dale Overbey, President, Foster Village Community Association  
Representative Bob McDermott  
Representative Nathan Suzuki  
Senator Norman Sakatomo



CA

0000 0025 27 19

DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4341 • FAX: (808) 527-8887

JEREMY HARRIS  
MAYOR



JONATHAN K. SHIMADA, PhD  
DIRECTOR AND CHIEF ENGINEER

IN REPLY REFER TO:  
98-13-0136

March 12, 1998

Mr. Mark Taylor, Chair  
Aliamanu/Salt Lake/Foster Village  
Neighborhood Board No. 18  
c/o Neighborhood Commission  
City Hall, Room 400  
Honolulu, Hawaii 96813

Dear Mr. Taylor:

Subject: Salt Lake Boulevard Widening, Bougainville Drive to Reeves Street

Thank you for your letter dated March 3, 1998, relating to the Board of Water Supply's 36-inch transmission main, Phase II, Maluna Street to Ala Liliko'i project on Salt Lake Boulevard.

Our updated schedule for our future road improvements in the area is as follows:

1. Bougainville Drive to Reeves Street

Final design is anticipated to be finished in August 1998. Federal funds are programmed for Federal Fiscal Year 1999 and construction is anticipated to start in early 1999 and end in late 2000. We intend to begin construction earlier if possible.

2. Reeves Street to Ala Liliko'i

Design is anticipated to start in 1998. Federal funds are anticipated to be programmed in Federal Fiscal Year 2000 and construction is anticipated to start in mid-2001 and end in mid-2003.

Should you have any questions, please call Tim Traug of the Division of Engineering at 523-6106.

Very truly yours,

  
Jonathan K. Shimada, PhD  
Director and Chief Engineer