

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU

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HONOLULU, HAWAII 96843

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December 11, 1995

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OFC. OF ENVIRONMENTAL
QUALITY CONTROL

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EDWARD M. STANTON

RAYMOND H. SATO

Manager and Chief Engineer

Mr. Gary Gill, Director
Office of Environmental Quality Control
State of Hawaii
220 South King Street
Fourth Floor
Honolulu, Hawaii 96813

Dear Mr. Gill:


Subject: Negative Declaration for the Proposed Dillingham Boulevard 42-Inch Water Main Project from Kalihi Street to Vineyard Boulevard, Honolulu, Oahu

The Board of Water Supply has reviewed the comments received during the public comment period which began on February 23, 1995. 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 negative declaration. We request that our proposed well project be published in the December 23, 1995 OEQC Bulletin as a Negative Declaration.

Attached are 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

Pure Water . . . our greatest need - use it wisely

174

1995-12-23-0A-FEA-42-inch water main from Kalihiki Street to
Vineyard Blvd
DEC 23 1995

FILE COPY

FINAL ENVIRONMENTAL ASSESSMENT
for the

DILLINGHAM BOULEVARD
42-INCH WATER MAIN
from **KALIHI STREET**
to **VINEYARD BOULEVARD**
Honolulu, Hawaii

NOVEMBER 1995

PREPARED FOR:

Board of Water Supply
City and County of Honolulu

Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819
(808) 833-7313 Fax: (808) 833-4764

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Final
Environmental Assessment

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**DILLINGHAM BOULEVARD 42-INCH WATER MAIN
from KALIHI STREET to VINEYARD BOULEVARD**

Honolulu, Hawaii

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Board of Water Supply
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TABLE OF CONTENTS

	<u>Page</u>
SECTION 1 - PROJECT DESCRIPTION	1-1
1.1 Purpose of Proposed Action	1-1
1.2 Location	1-1
1.3 Description of Proposed Action	
1.3.1 Proposed Action	1-1
1.3.2 Construction Materials and Methods	1-5
1.4 Estimated Construction Schedule and Cost	1-6
SECTION 2 - AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES	2-1
2.1 Existing Land Use Conditions	2-1
2.2 Topography and Soils	2-1
2.3 Surface Water	2-2
2.4 Flora and Fauna	2-3
2.5 Noise	2-4
2.6 Air Quality	2-5
2.7 Recreation	2-5
2.8 Historic Sites and Archaeological Resources	2-6
2.9 Aesthetic Values	2-6
2.10 Economic Activity	2-6
2.11 Utilities	2-7
2.12 Roadways and Traffic	2-7
2.13 Police, Fire and Emergency Services	2-9
SECTION 3 - ALTERNATIVES TO THE PROPOSED ACTION	3-1
3.1 No Action	3-1
3.2 Alternative Alignments	3-1
SECTION 4 - DETERMINATION	4-1
SECTION 5 - AGENCIES CONSULTED & REFERENCES	
Agencies Consulted	5-1
References	5-2
SECTION 6 - DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS AND RESPONSES	6-1

TABLE OF CONTENTS

APPENDICES

APPENDIX A- DEPARTMENT OF THE ARMY
NATIONWIDE PERMIT RULES, REGULATIONS & CONDITIONS

APPENDIX B- THE NATURE CONSERVANCY OF HAWAII
U.S. DEPT. OF INTERIOR, FISH AND WILDLIFE SERVICE
U.S. DEPT. OF COMMERCE, NATIONAL MARINE FISHERIES
SERVICE
FLORA AND FAUNA

APPENDIX C- STATE OF HAWAII
DEPT. OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
HISTORIC SITES

TABLE OF CONTENTS

LIST OF FIGURES

<u>FIGURE NO.</u>	<u>DESCRIPTION</u>
1	Location Map
2	Typical Trench Detail & Typical Pavement Restoration Detail
3	State Land Use Map
4	Zoning Map
B-1	The Nature Conservancy of Hawaii Hawaii Natural Heritage Program Significant Flora and Fauna Sightings
C-1	Historic Preservation Division Fishpond Map

SECTION 1

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PROJECT DESCRIPTION

PROJECT DESCRIPTION

1.1 PURPOSE OF PROPOSED ACTION

The City and County of Honolulu Board of Water Supply is proposing to construct a 42-inch transmission main along Dillingham Boulevard and Liliha Street from Kalihi Street to Vineyard Boulevard. The primary purpose of the proposed main is to increase the overall transmission capacity from the Pearl Harbor area to the Honolulu service area. The existing water main within Dillingham Boulevard is a 12-inch water main which provides distribution water service to the immediate vicinity. The 42-inch water main will provide transmission capacity to areas beyond the Dillingham area, ultimately serving Downtown Honolulu, the waterfront, and Waikiki. The design carrying capacity of the proposed 42-inch water main is 37 million gallons per day. This is based on the peak hour demand for the entire integrated water system.

Installation of the main will benefit the public by fulfilling constantly increasing water demands as well as providing a reliable back-up in the event of a water main break in the existing north 42-inch water main west of the Liliha Street and Vineyard Boulevard intersection.

1.2 LOCATION

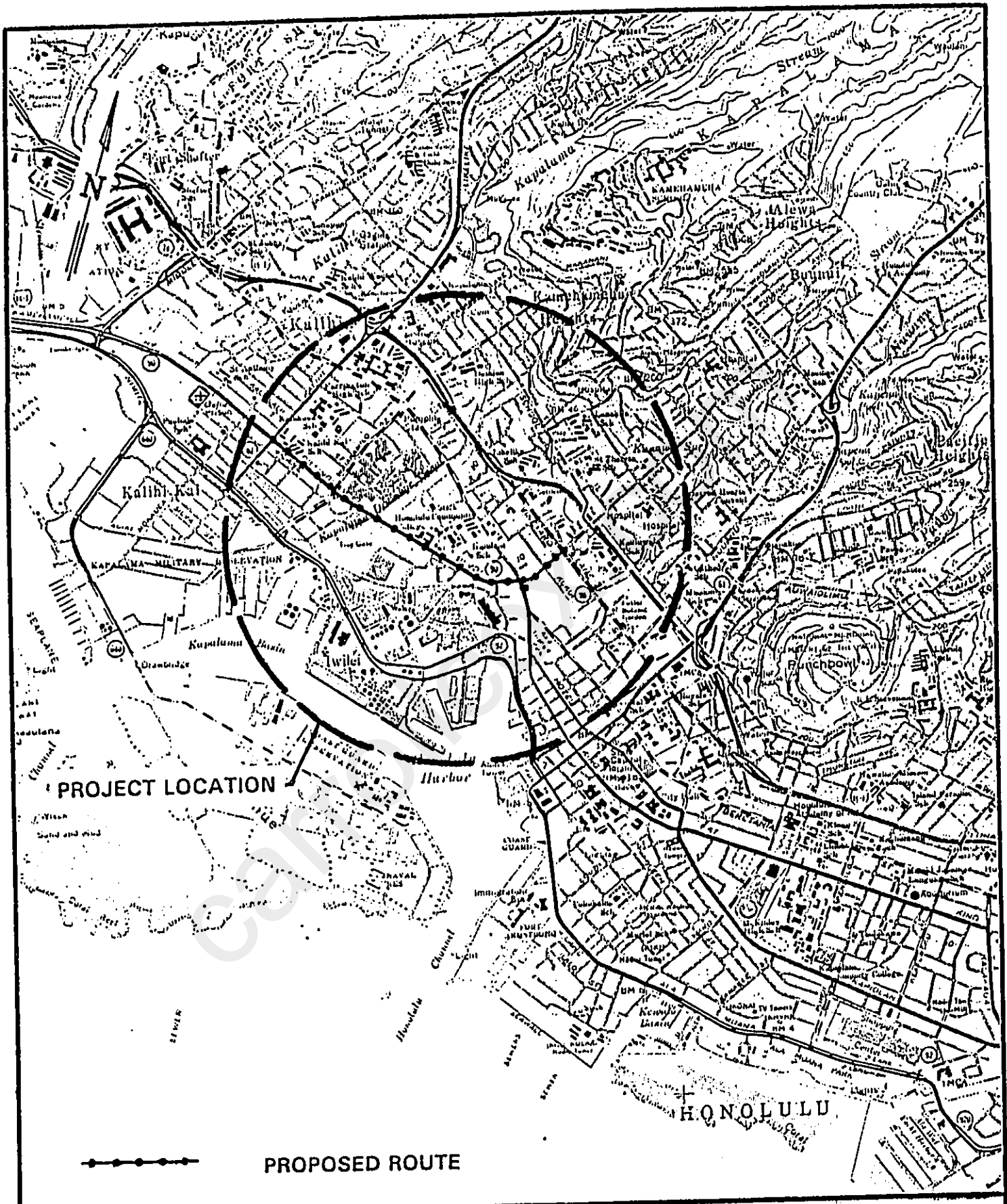
The proposed water main will be routed through the Kalihi District of Honolulu, as shown in Figure 1. Construction of the proposed main will begin at Kalihi Street and continue in the Diamond Head direction along Dillingham Boulevard until it reaches Kapalama Drainage Canal. At this point, the main will either be routed under or over on either side of the canal and continue with its alignment along Dillingham Boulevard. The main will turn to travel in the Diamond Head direction along North King Street for a short distance before it turns again to travel along Liliha street in the mauka direction. Finally, the main will tie into an existing 42-inch water main that runs along Vineyard Boulevard. Provisions will be made along the new main to allow for branch connections in the future. A majority of the new line will be installed in the city right-of-way, except for the length of pipe crossing the Kapalama Drainage Canal.

According to the Flood Insurance Rate Map - September 1990, compiled by the Federal Emergency Management Agency, the entire length of the proposed alignment is designated to be in Zone X-unshaded areas, determined to be outside the 500 year flood plain.

1.3 DESCRIPTION OF THE PROPOSED ACTION

1.3.1 Proposed Action

The proposed water main will commence at the intersection of Kalihi Street and Dillingham Boulevard where it will connect to an existing 42-inch water main. Then the proposed water main will travel along Dillingham Boulevard and along Liliha street until it connects to another existing 42-inch water main on Vineyard Boulevard. The water main will be



DILLINGHAM BOULEVARD 42-INCH WATER MAIN
 FROM KALIHU STREET TO VINEYARD BOULEVARD
 Board of Water Supply
 City and County of Honolulu

Figure 1
 LOCATION MAP

PROJECT DESCRIPTION

approximately 7,150 feet long. Construction will be split into phases to divide the construction costs into affordable portions.

The Board of Water Supply has proposed the following phases for the construction of the water main.

Phase 1A: Along Dillingham Boulevard from Kalihi Street to Waiakamilo Road
(approximately 1,787 linear feet)

Phase 1B: Along Liliha Street from King Street to Vineyard Boulevard,
(approximately 1,100 linear feet)

Phase 2: Along Dillingham Boulevard from Waiakamilo Road to King Street
(approximately 4,263 linear feet)

The construction of each phase will be completed prior to the start of construction for the next phase. The order of construction as to which phase will be constructed first is not final and subject to change upon the results of the agency review.

The water main crossing at Kapalama Drainage Canal may require, but shall not be limited to, the acquisition of the following permits and certifications:

1. **Stream Channel Alteration Permit**
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resource Management

The Commission on Water Resource Management requires that this permit be obtained if a stream bank and/or bed is altered in any way. Therefore, the need for this permit will depend on the final design of the crossing of Kapalama Drainage Canal.

2. **Letter of Permission for Work in Tidal Waters**
United States Corps of Engineers

The waters in Kapalama Drainage Canal are under the influence of the tides, therefore a Letter of Permission for Work in Tidal Waters must be obtained from the United States Corps of Engineers for all design alternatives considered in this report regardless of whether the pipe is routed above or below the canal.

PROJECT DESCRIPTION

3. **Department of the Army (DA) Permit**
United States Corps of Engineers

A DA permit will not be required if the water main is routed above the canal. This is because no "fill" will be introduced into the canal waters. Support piles used to hold up the water main are not considered as "fill".

If the water main is designed to be routed below the canal and/or if any activity occurs in or around the canal a DA permit may be required for the project. If so, the project may be eligible to be covered under Nationwide Permit (NWP) #12: Utility Line Backfill and Bedding and NWP #33: Temporary Construction and Access. To be covered by the NWP, all of the general NWP conditions, as well as all of the conditions listed under the specific NWP's must be met. A listing of the conditions are provided in Appendix A. Permits with coverage under the NWP #12 and/or NWP #33 will also need to obtain both a Section 401 Water Quality Certification from the State Department of Health and a Coastal Zone Management Certification from the Office of State Planning. If the NWP conditions can not be met, an Individual Permit must be sought.

4. **Coastal Zone Management Certification**
State of Hawaii
Office of State Planning
Coastal Zone Management Office

Under the Federal consistency provisions of the Coastal Zone Management Act of 1972, as amended, this certification is required for all Federally licensed or permitted activities affecting the coastal zone. It ensures that these activities will be conducted in a manner consistent with the State's Coastal Zone Management Program.

As indicated in the Department of Army permit section, a coastal zone management certification will be required for the project to be eligible for coverage under NWP #12 and/or NWP #33. Also, a coastal zone management certification will be required for the design alternatives that place the pipe above the canal. In summary, all the design alternatives will require a CZM certification, since all the design alternatives require a Letter for Permission to work in Tidal waters.

5. **Section 401 Water Quality Certification**
State of Hawaii
Department of Health
Clean Water Branch

Title IV (Permits and Licenses, Certification, Section 401 (a)(1)) of the Clean Water Act of 1977 (Public Law 95-217) requires that any applicant seeking a Federal license or permit to conduct activities involving the possibility of discharge into navigable waters must obtain this certification.

PROJECT DESCRIPTION

As indicated in the Department of Army permit section, this certification must be obtained for the project to be eligible for coverage under NWP #12 and/or NWP #33.

6. **National Pollutant Discharge Elimination System (NPDES) General Permit**
State of Hawaii
Department of Health
Clean Water Branch

A discharge permit issued under the authorization of the NPDES is required for the disposal of hydrotesting water into State waters.

Coverage under the general permit for storm water discharges associated with construction activity must be sought if the total excavation area for the project exceeds 5 acres. It is anticipated that the total excavation area for the project, including lanes or areas required for construction vehicle movement and access, will be under 5 acres. On this basis, an NPDES permit for storm water discharges associated with construction activity is not required.

During the excavation of the water main trench, it is anticipated that ground water will be encountered. To address this situation, the Board of Water Supply proposes to dewater the trench by pumping the ground water from the working trench into another trench that is not being worked on. It is anticipated that no ground water will be discharged into any body of water or stream. It is on this basis that coverage under a general permit for the discharge of water from dewatering will not be required.

However, should the dewatering method by pumping the ground water from one trench into another trench not work, the Board of Water Supply proposes a backup emergency plan that may utilize tanker trucks, filter tanks, silt curtains, and sand bags. A backup dewatering plan if needed will be prepared and submitted to the applicable government agencies for approval. Also, should the backup emergency plan involve the discharge of ground water into any body of water or stream, an NPDES permit for dewatering will be required.

According to the Department of Land Utilization (DLU), the project does not fall within any Special Management or Shoreline Setback areas. Therefore, an SMA permit or Shoreline Variance is not required for the project. However, DLU is requiring that an easement be obtained for the crossing of Kapalama Drainage Canal. The Department of Land and Natural Resources has determined that the project will not cross into a Conservation District, eliminating the need for a Conservation District Use permit. The Department of Public Works has indicated that if there is discharge into the City drainage system, a City dewatering permit will be required.

PROJECT DESCRIPTION

The Board of Water Supply will be required to consult and coordinate with all mentioned agencies concerning the certifications and permits described above. The project will be designed and installed in accordance with the City and County of Honolulu Board of Water Supply Water System Standards, and shall comply with all City, State, and Federal regulations.

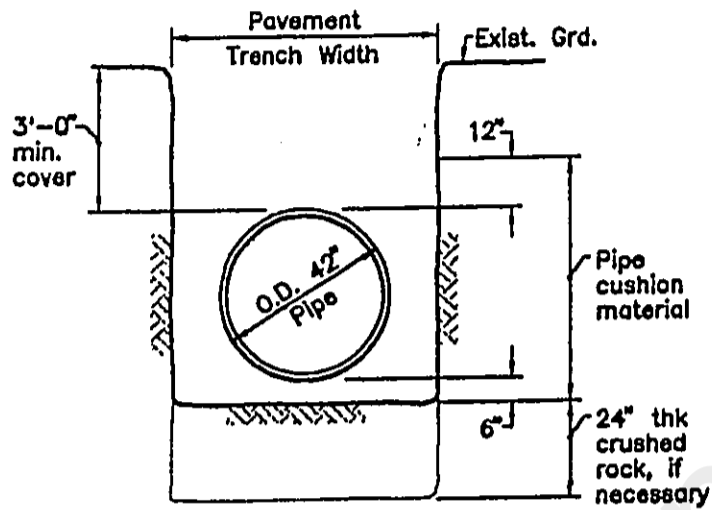
1.3.2 Construction Materials and Methods

The proposed water main will be constructed with either concrete cylinder pipe (CCP) or poly-wrapped ductile iron pipe. The material type will be selected after the bid process is completed. Butterfly valves will be installed along the length of the water main to allow for sections of the line to be isolated for maintenance and repair. The main will be positioned at various depths to avoid existing utilities, but a maximum cover of 8 feet will be sustained. A typical trench cross-section which is in accordance with the Board of Water Supply design standards is provided in Figure 2.

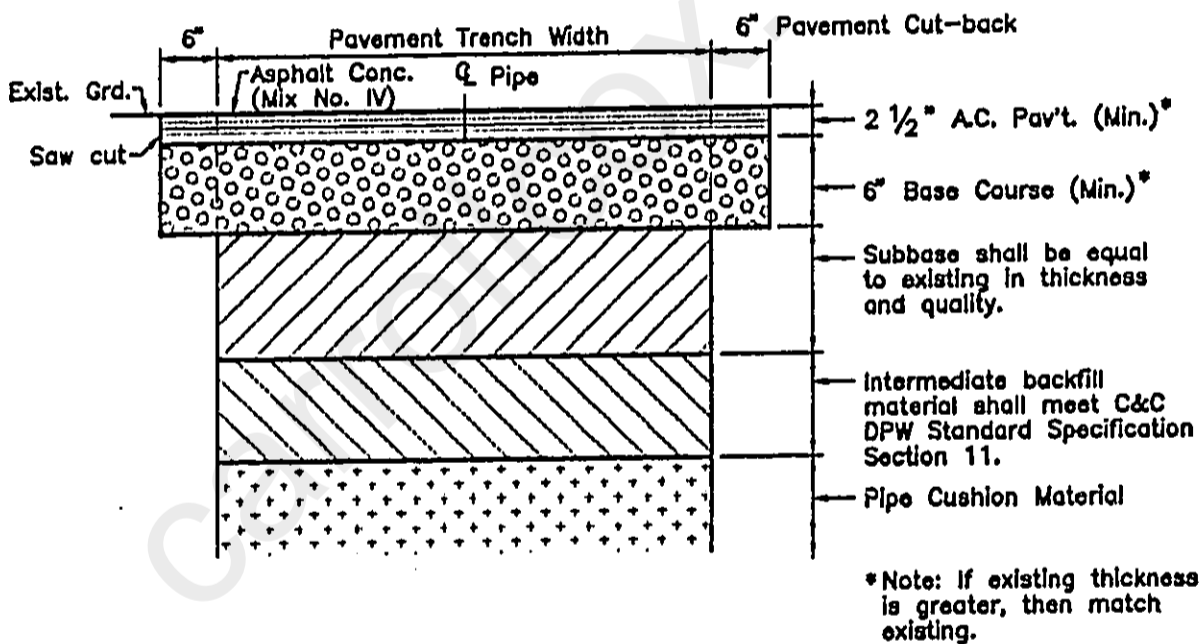
Installation procedures will include removal of pavement, trench excavation, pipe placement, backfilling, compaction and pavement restoration. Roadway trenches will be approximately 5'-6" wide and 150 feet long at any given time. Excavated material will not be stockpiled along the side of the trench, but shall be removed and later returned by the contractor during backfilling activities. The contractor will be responsible for all excess and/or unsuitable material. It is anticipated that ground water will be encountered during excavation, in which dewatering will be required.

As the transmission main is installed, it will be hydrostatically tested and disinfected. The contractor will subject the water main to a hydrostatic test pressure of 150 pounds per square inch. After the main is hydrostatically tested and any leaks repaired, the main will be disinfected with chlorine at a concentration of 50 milligrams per liter. This chlorinated water will be retained in the pipeline overnight and disposed of in accordance with applicable Federal, State, and City requirements. Prior to construction, a plan indicating the locations and amounts of chlorinated water to be discharged will be submitted by the contractor for review and approval. Chlorinated water will not be directly discharged into any body of water or stream. The water quantity anticipated to be discharged during hydrotesting is approximately 644,000 gallons for Phase 1; 730,000 gallons for Phase 2; and 1,285,000 gallons for Phase 3. These numbers are tentative and will be finalized during the design phase of the project. A discharge of effluent permit shall be obtained should there be any discharge into the City drainage system.

Several alternatives are being considered for the crossing of Kapalama Drainage Canal with the water line being placed either above or below the water and on either side of the bridge. Alternative 1 involves the installation of the 42-inch main under the canal. The pipe will be jacketed in concrete and placed on friction piles, if necessary, in the canal area. The depth of the water main below the canal invert will be determined during the project's design phase. One of the considerations will be given to maintaining full channel flow capacity. Construction plans showing the established profile will be submitted to the



TYPICAL TRENCH DETAIL
Not To Scale



TYPICAL PAVEMENT RESTORATION DETAIL
Not To Scale

Details from Board of Water Supply "DILLINGHAM BOULEVARD:
INSTALLATION OF 42-INCH WATER MAIN", JOB 80-38 PARTS A,
B, AND C, DATED 1-11-80.
Revised per BWS comments dated 10-19-94.

DILLINGHAM BOULEVARD 42-INCH WATER MAIN
FROM KALIHI STREET TO VINEYARD BOULEVARD

Board of Water Supply
City and County of Honolulu

Figure 2
TYPICAL TRENCH DETAIL
&
TYPICAL PAVEMENT RESTORATION DETAIL

PROJECT DESCRIPTION

applicable regulatory agencies for their approval. Alternative 2 uses piles to support the water main above the water surface. Should alternative 2 be pursued, visual concerns of an over-canal crossing will be evaluated during the design phase of the project.

If the final design impacts the canal bed, then one half of the canal crossing will be temporarily dammed during construction at a time to maintain drainage capacity and allow aquatic biota unobstructed passage. This will also allow construction of the water main in the canal bed while preventing unnecessary soil erosion from the project into the waterways. Sediment and mud will not be stockpiled and will not be reused as backfill. The contractor will be responsible for the immediate appropriate disposal of the sediment. This shall not be done in any manner that would adversely affect the health, safety, and welfare of the surrounding community.

Applicable City and County specifications and standards will be followed during all phases of the project. Construction within the City right-of-way will also be in accordance with the Americans with Disabilities Act.

1.4 ESTIMATED CONSTRUCTION SCHEDULE AND COST

As discussed in Section 1.3.1, construction will be divided into phases. The construction period for Phase 1 of the proposed project is anticipated to last 15 months. The current estimated cost for Phase 1 is approximately \$4.7 million. The construction period for Phase 2 of the proposed project is anticipated to last 18 months. The current estimated cost for Phase 2 is approximately \$5.1 million. The phases will be funded entirely by the City and County of Honolulu, Board of Water Supply.

SECTION 2

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**AFFECTED ENVIRONMENT AND POTENTIAL
IMPACTS AND MITIGATIVE MEASURES**

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

2.1 EXISTING LAND USE

The area surrounding the proposed project is classified as Urban by the State Land Use Map, shown in Figure 3. Areas near and adjacent to the main are designated on the Development Plan as: Commercial; Commercial Emphasis Mixed Use; Commercial-Industrial Emphasis Mixed Use; Industrial; Residential; Residential Emphasis Mixed Use; Public and Quasi - Public; Parks and Recreation; Low Density Apartment, and Medium Density Apartment. The Zoning Map for the area is provided in Figure 4. The proposed line falls within an Industrial Mixed Use Zone along Dillingham Boulevard from Kalihi Street to North King Street. This area includes restaurants, shopping areas, learning institutions, and business offices. As the water main crosses North King Street it enters a Community Business Mixed Use Zone. Fast food restaurants, a shopping center, and a bank are in the immediate area and are included within this zone. The main then enters an Apartment District as it travels mauka on Liliha Street. The last segment of pipe will continue to travel in the same direction into an area designated as a Community Business Zone. The City's Planning Department has indicated that the project is consistent with the water system designation on the Primary Urban Center Development Plan Public Facilities Map.

Impacts and Mitigation Measures

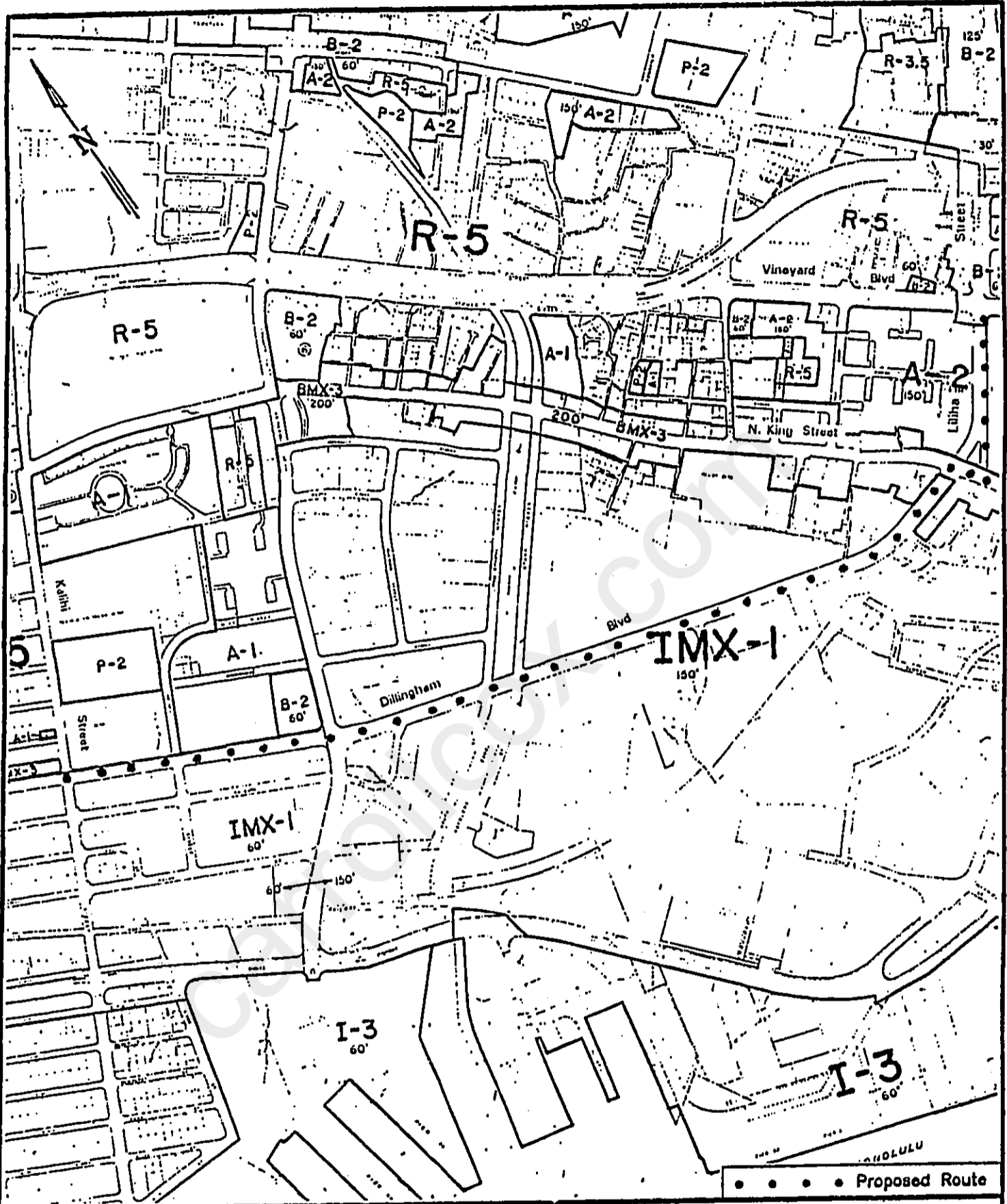
The installation of the proposed water main is not anticipated to hinder the existing land uses in the vicinity and surrounding areas. Disruption to individual businesses and residences will last only as long as it takes to install each phase of the water main. The contractor shall provide ingress to and egress from driveways and public streets at all times.

2.2 TOPOGRAPHY AND SOILS

The land along the alignment of the proposed water main is relatively flat. The project will need to have a soils report completed to specifically identify the types of soils that will be encountered and disturbed. However to give a general idea of the kind of soil that might be expected, the Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii, shows the soil types in the area to consist mainly of Ewa silty clay loam moderately shallow, 0 to 2 percent slopes, fill land, mixed, and Kaena clay, 2 to 6 percent slopes.

The Ewa silty clay loam is found in different areas along Dillingham Boulevard. The soil typically consists of a dark reddish-brown silty clay loam surface layer that is approximately 18" thick. The subsoil, about 42" in thickness, is dark reddish-brown and dark red silty clay loam that has a subangular blocky structure. Coral limestone substratum is encountered at depths of 20 to 50 inches. Runoff is very slow and erosion hazard is slight.





DILLINGHAM BOULEVARD 42-INCH WATER MAIN
FROM KALIHU STREET TO VINEYARD BOULEVARD

Board of Water Supply
City and County of Honolulu

Figure 4

ZONING MAP

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

Fill land is encountered in areas along Dillingham Boulevard, near the Kapalama Canal. Soil in these areas generally consists of dredged material from the ocean or hauled from nearby areas, garbage, and other sources.

The Kaena clay is found in areas near the Vineyard Boulevard and Liliha Street intersection. The surface layer of this soil is generally dark gray clay with few or no stones, approximately 10" thick. The next layer consists of dark-gray and dark grayish brown clay that has a prismatic structure and ranges from 36" to more than 48" in thickness. This layer is underlain by highly weathered gravel. Runoff is slow and erosion hazard is slight.

Impacts and Mitigation Measures

No negative impacts to the topography and soils are anticipated with the installation of the proposed water main. This is because a majority of the line will be routed in the road right-of-ways. Disruption of soils will occur during excavation and backfill activities and it is anticipated that backfill material will be imported. The replacing of existing soil with rock and pipe cushion is not expected to pose any adverse conditions. Soil disturbance will be temporary and existing surface conditions will be restored upon completion of construction. Additionally, soil in the canal beds which will be removed for the installation of the pipeline will not be stockpiled and will not be reused as backfill. The backfill material will be imported and shall be restored to the original canal bed elevation.

2.3 SURFACE WATER

Kapalama Drainage Canal is the only surface water feature in the immediate vicinity of the proposed water main. A water quality analysis may be done for the project depending upon the selected method for crossing the canal. Also, should any of the permits and/or certifications such as the NPDES permit and/or the 401 Water Quality Certification require water analysis, the Board of Water Supply will need to comply with such requirements.

Impacts and Mitigation Measures

There will be several temporary impacts concerning the quality of the canal waters during construction. They include:

- * disturbance of existing sediment in the canal causing an increased level of turbidity,
- * removal of sediment along the alignment of the proposed main,
- * dislocation of aquatic life in the immediate vicinity and
- * temporary suspension of recreational activities, such as fishing and boating, at the canal.

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

Turbidity and other types of construction-related impacts are expected to be temporary. The contractor will employ methods of containing turbidity and suspended solids to the smallest area possible to prevent the pollution of adjacent waters. This may be accomplished by utilizing silt curtains or oil booms, if necessary, to surround the coffer dams or piles. Dewatered effluent, if any, will comply with the DOH NPDES and Water Quality Standards by the use of settling basins/chambers that will treat and contain pollutants. Best Management Practices and a Dewatering Treatment Plan will be submitted to the DOH as part of the 401 Water Quality Certification and NPDES permit requirements.

The removal of sediment along the alignment of the proposed main is expected to create a condition better than the original condition.

Impacts to aquatic life are expected to be minimal since construction will be temporary and contained. Dislocated species can return and reestablish in the area after construction is completed. Cofferdams will only be constructed across one half of the canal at any time to allow free passage of any aquatic species and flood flows.

Although time may be needed for aquatic life to return to the area after construction, recreational activities will not be impacted significantly. Activities can resume immediately after construction is completed within the area.

2.4 FLORA AND FAUNA

In a research of the Nature Conservancy of Hawaii's database, no known rare or endangered species of flora and/or fauna are found in the proposed project area. A map from the Nature Conservancy of Hawaii showing the significant sightings in the Kalihi District is provided as Figure B-1 in Appendix B. The U.S. Fish and Wildlife Service says "the mudflats in Ke'ehi Lagoon, which is located adjacent to the project area, are a major staging area for migratory shorebirds." Also threatened green turtles (*Chelonia mydas*) may be found near the project area. However, the National Marine Fisheries Service indicated that their knowledge of the distribution and behavior of the turtles lead them to highly doubt the presence of the species in the upper portions of Kapalama Canal. The National Marine Fisheries Service has also indicated that there should be no effects on any listed species or critical habitat under their jurisdiction since the water main will be routed under the canal.

Impacts and Mitigation Measures

Problems concerning disturbance of plant and animal resources are anticipated to be small, because a majority of the water main will be installed in the road right-of-way.

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

As stated earlier, portions of the main will cross Kapalama Drainage Canal and may run through grassed areas just off Liliha Street. Vegetation in these immediate areas will be disturbed during construction. Affected landscaped areas will be restored to their present condition upon completion of work. Displacement of weeds and rodents are not regarded as adverse impacts. Construction in the canal may temporarily displace fish and crustaceans in the area but no permanent impacts are anticipated. Canal beds shall be restored to their original or better condition. No waste materials from construction activity will be discarded in the canal beds. Chlorinated water used for pipeline disinfecting will not be directly discharged into any body of water or the canal. Discharge of this water will be undertaken so that it will not adversely impact aquatic resources.

2.5 NOISE

Ambient noise in the areas of the proposed construction are produced primarily by motor vehicle traffic and industrial activities. People talking or shouting, trash collection operations, and other construction activities in the area also contribute to the noise at these locations.

Impacts and Mitigation Measures

Noise will be generated during all phases of the project. Pneumatic equipment will be used along the entire length of the proposed route and acute impact noise is anticipated during the driving of piles, if needed, in the Kapalama Drainage Canal. Noise contributed by construction of the project may be a nuisance to those working and residing in the immediate area. However, construction presence in the area is temporary and will be proceeding incrementally along the proposed route. Adequate and proper maintenance of construction machines and vehicles should help to reduce unnecessary noise. The community shall be given ample notice of construction activities and elevated noise levels during work. All activities shall be coordinated to minimize noise generation, and shall comply with Title 11 of the Department of Health Administrative Rules, Chapters 42 and 43. If noise levels exceed levels outlined in Chapter 43, a noise permit shall be obtained by the contractor from the Department of Health.

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

2.6 AIR QUALITY

Air quality in the proposed project area is mainly influenced by traffic emissions.

Impacts and Mitigation Measures

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 and backfilling activities are performed. Since the duration of work in any one location will be short, impacts are expected to be small.

Proper maintenance of construction equipment shall help to reduce emissions. Fugitive dust may be controlled by frequent watering of exposed dirt surfaces and immediate paving or landscaping of completed areas of construction. Open body trucks shall be covered at all times while transporting materials that may generate fugitive dust. Other types of dust controls shall 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 county ordinances relating to excavation and stockpiling procedures. Strict adherence to approved erosion and dust control plans is expected to minimize negative impacts.

2.7 RECREATION

There are several public recreation facilities near the proposed route of the water main, including Kapalama Drainage Canal, and Kalakaua District Park.

Impacts and Mitigation Measures

Recreational facilities will be impacted temporarily when construction occurs in the immediate area. Increased noise, dust and exhaust fumes may irritate users of the above facilities, especially at the Kapalama Drainage Canal since it is considered one of areas where construction will take place. Restrictions concerning fishing and crabbing at the canal may be required during construction of the canal crossing for safety reasons.

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

2.8 HISTORIC AND ARCHAEOLOGICAL RESOURCES

The State Historic Preservation Division says there are no known historical or archaeological resources along the proposed route of the water main. A buried fishpond, Loko Kuwili is located near the east end of Dillingham Boulevard, as shown in Figure C-1 in Appendix C.

Impacts and Mitigation Measures

Since work will be confined to the street right-of-way near the end of Dillingham Boulevard, the State Historic Preservation Division believes that construction will not affect the historic site. Should historic sites, including human burials, be uncovered during installation of the water main, all work in the area shall be terminated and the Historic Preservation Division shall be contacted for further action.

2.9 AESTHETIC VALUE

The scenery in the proposed areas of construction is mainly comprised of low and multi-story buildings, wide and busy streets, parked cars, open spaces, and sidewalks lined with planter strips and trees. Backdrop views include the Koolau Mountains, Punchbowl, and the downtown skyline.

Impacts and Mitigation Measures

Construction is anticipated to cause negative impacts on the visual features of the subject areas. Since work will travel along the length of the water main, views will be temporarily affected, and last for short periods of time at each location. Also, the type of activities involved with the construction of the water main is anticipated to only partially affect views of adjacent areas. The aesthetic value of the canal will remain the same if the crossing is installed below the water surface in the canal bed. Otherwise, the water main will become a visual feature next to the bridge since the water main will be supported by piles protruding above the water surface. If so, the visual concerns of an over-canal crossing will be evaluated during the design phase of the project.

2.10 ECONOMIC ACTIVITY

The proposed water main will be installed along streets with a number of different types of businesses including restaurants, convenience stores, banks, offices, and repair shops. There are also several shopping centers immediately adjacent to the proposed alignment. These include Waiakamilo Shopping Center, Kapalama Shopping Center and Dillingham Plaza. Local residents from areas around the island frequent the proposed project area.

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

Impacts and Mitigation Measures

During construction, customers of businesses in the area may experience some inconveniences concerning vehicular access and parking. Traffic congestion may also discourage potential customers from entering the general area. Mitigation measures include shortening the amount of construction time at each location by lengthening work hours where needed. Work may also be scheduled during hours when most businesses are closed to avoid the potential loss of customers altogether.

As discussed previously, installation of the main will benefit the public by fulfilling constantly increasing water demands as well as providing a reliable back-up in the event of a water main break in the existing north 42-inch water main west of the Liliha Street and Vineyard Boulevard intersection. The City will benefit economically by saving on overtime and rush services required to return services lost during a critical main break.

The project will provide jobs for local contractors, material suppliers and construction workers. Local eating establishments may also benefit from an increased amount of people working in the area.

2.11 UTILITIES

The water main is proposed to be aligned in existing streets where numerous water, gas, drain, electrical, communication and sewer lines exist. The lines vary greatly in size, from small local lines and laterals to large mains. Telephone and power lines exist overhead and underground.

Impacts and Mitigation Measures

The water main may possibly impact other utilities in the area. To mitigate such an impact, the final design and layout of the water main shall consider all of the existing utilities in the area. This includes coordination with all of the utility agencies to verify existing line locations and to prevent any possible conflicts with any existing utility.

2.12 ROADWAYS AND TRAFFIC

The proposed water main will be aligned along the highly traveled roadways of Dillingham Boulevard and Liliha Street. Dillingham Boulevard, from Kalihi Street to North King Street is a five lane arterial street that is 86 feet in width and is aligned to serve east-bound and west-bound traffic. Two lanes provide traffic flow in each direction. The center lane, for a majority of the street alignment, serves as a two-way left turn lane. Approximately 225 feet east of Alakawa Street, the center lane becomes an additional lane serving east-bound traffic. The length of North King Street affected by this project has a right-of way

AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND MITIGATIVE MEASURES

width of 100 feet. Four lanes serve west-bound traffic and three lanes serve those traveling east. Liliha Street is a collector/distributor road with a right-of-way width of 80 feet, serving north-bound and south-bound traffic. Again, two lanes are provided for travel in each direction while the center lane serves as a left turn lane. The outer lanes on Liliha Street, mauka of North Kukui Street are used for street parking.

As mentioned previously, there are several types of businesses and shops along the proposed route. Shopping areas, including Waiakamilo Shopping Center, Dillingham Plaza and Kapalama Shopping Center, are also located along the Dillingham Boulevard portion of the proposed main. In addition, learning institutions, such as Kalihi-Kai Elementary School and Honolulu Community College are located along the proposed main alignment.

Impacts and Mitigation Measures

Temporary traffic congestion is anticipated during all phases of construction. This is expected to cause residents, students and workers in the area to experience longer travel times, especially during morning and afternoon rush hours when traffic is usually at its peak. Since construction will travel along the water main alignment, traffic congestion in each area is expected to last for a short time. Available on-street parking will probably decrease because of the closure of lanes and the need for parking of vehicles related to the construction activity.

At least two lanes of roadway is anticipated to be closed to traffic to allow space for construction access and activity. Adequate access to driveways, businesses, residences, and public streets shall be provided. Mitigative measures include the use of traffic controls during working hours, as well as adequate public notice. An approved traffic control plan shall be used to ensure efficient movement through the construction area. Regulatory and warning signs, cones, barricades and police officers may be incorporated within this plan. Many alternate routes are available for the areas affected and motorists shall be made aware of them to ease traffic congestion.

To help address the traffic congestion, the Board of Water Supply proposes to have each phase completed prior to the start of the next phase. The contractor will be required to take all necessary precautions to provide for the protection, convenience and safety of the public. The Oahu Transit Services shall be notified of anticipated construction activities for the coordination of temporary routing plans and/or the relocation of any bus stops, if needed.

During non-working hours, open trenches shall be covered with non-skid steel plates and all lanes shall be opened for traffic. All work within City and County right-of-ways shall be accomplished within the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday, unless otherwise permitted by the City and County of Honolulu, Department of Transportation Services.

**AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS AND
MITIGATIVE MEASURES**

2.13 POLICE, FIRE AND EMERGENCY SERVICES

Police, fire and emergency services depend on a safe and passable route through streets under construction, as well as to properties adjacent to the project site.

Impacts and Mitigation Measures

Police, fire and emergency services shall be notified of construction activities and scheduling ahead of time to deter drivers from using streets with anticipated delays. Fire apparatus access shall be maintained throughout the project.

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SECTION 3

ALTERNATIVES TO THE PROPOSED ACTION

ALTERNATIVES TO THE PROPOSED ACTION

3.1 NO ACTION

The no action alternative is not considered because the existing and future water needs will not be adequately addressed. Installation of the main will also provide a reliable back-up in the event of a water main break in the existing north 42-inch water main west of the Liliha Street and Vineyard Boulevard intersection. In addition, the major south trunk main will serve to relieve the increasing peak hour water demand as Honolulu expands in the Waterfront and Kakaako areas. Adequate water service to these areas may not be possible without the additional transmission capacity that this transmission main will provide.

3.2 ALTERNATIVE ALIGNMENTS

The water main installation from Kalihi Street toward downtown was deemed most appropriate along Dillingham Boulevard in terms of hydraulics and feasibility because it is an extension of the existing 42" water main on Dillingham Boulevard from Nimitz Highway. Alternative alignment options such as Nimitz Highway and King Street would incur additional costs and create worse traffic problems and were therefore discarded very early in the assessment process.

SECTION 4

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DETERMINATION

DETERMINATION

The assessment shows there will not be any significant negative effect on the environment by the work for this project and that the preparation of an Environmental Impact Statement is not required. Thus, a negative declaration for the project is issued based on the following,

- * Existing land use of the areas surrounding the proposed main alignment will not be altered.
- * No negative impacts of the topography and soil in the area are anticipated.
- * The crossing of Kapalama Drainage Canal will not contribute to any type of long term contamination of the canal, although turbidity and disturbance of sedimentation is expected to occur during construction. The contractor can minimize the amount of construction related water pollution by diligent use of mitigative measures.
- * There are no significant flora or fauna species within the proposed project areas. Temporary displacement of plants and animals are expected, although work in any one area is expected to be for a short time.
- * No permanent impacts are anticipated regarding air quality and ambient noise levels. During construction, these parameters will be negatively affected, but impacts will be temporary and minor.
- * Users of recreation facilities near the project area may be affected during construction. Negative impacts is expected to be experienced only when construction activities are conducted in the immediate vicinity.
- * No known historic or archaeological resources are located within the project site.
- * Decreases in economic activity will be minimized during construction due to proper use of traffic controls and ample access to all driveways and parking lots. No permanent impacts are anticipated.
- * Traffic congestion will be temporary but will be mitigated through the use of approved traffic control plans and satisfactory public notification. No permanent impacts on traffic are anticipated.
- * The project will not displace any residences or businesses.
- * All areas will be restored to its previous condition.
- * The project is in conformance with the City and County of Honolulu Land Use Ordinance.
- * The Honolulu area will benefit from greater continuity of water flow and increased transmission capacity.

SECTION 5

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AGENCIES CONSULTED & REFERENCES

AGENCIES CONSULTED & REFERENCES

AGENCIES CONSULTED

Federal

U.S. Department of the Army, Pacific Ocean Division, Corps of Engineers
U.S. Department of the Interior, Fish and Wildlife Service
U.S. Department of the Interior, U.S. Geological Survey Water Resource Division
U.S. Department of Commerce, National Marine Fisheries Service

State

Department of Accounting and General Services
Department of Education
Department of Health
Department of Land and Natural Resources, Office of Conservation and Environmental Affairs
Department of Land and Natural Resources, Division of Water Resource Management
Department of Land and Natural Resources, State Historic Preservation Division
University of Hawaii, Environmental Center

City and County Agencies

Board of Water Supply
Building Department
Planning Department
Honolulu Police Department
Honolulu Fire Department
Department of Transportation Services
Department of Land Utilization
Department of Public Works

Other

The Nature Conservancy of Hawaii

AGENCIES CONSULTED & REFERENCES

REFERENCES

1. Board of Water Supply, 1977. Dillingham Boulevard, 42-Inch Water Main from Kalihi Street to Vineyard Boulevard, Environmental Assessment, April 23.
2. City and County of Honolulu, Zoning Map
3. Department of the Army, Corps of Engineers, 1991. Federal Register, Volume 56, No. 226, November 22.
4. Federal Emergency Management Agency, Flood Insurance Rate Map, City and County of Honolulu, Hawaii. Community Panel Number 150001 0112C and 150001 0115C, Map Revised: September 28, 1990
5. State of Hawaii, State Land Use Map
6. United States Department of Agriculture Soil Conservation Service in cooperation with The University of Hawaii Agricultural Experiment Station, 1972, Soil Survey of Islands Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.
7. Yoshizaki, Harold I., 1980. Dillingham Boulevard 42-Inch Water Main, Job 77-105, Construction Plans.
8. Yoshizaki, Harold I., 1980. Dillingham Boulevard 42-Inch Water Main, Job 80-38 Parts A & B, Construction Plans

SECTION 6

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**DRAFT ENVIRONMENTAL ASSESSMENT
COMMENTS AND RESPONSES**

DRAFT ENVIRONMENTAL ASSESSMENT COMMENTS AND RESPONSES

The following list indicates the agencies, organizations, and individuals who were sent a copy of the Draft Environmental Assessment for the Dillingham Boulevard 42-inch water main from Kalihi Street to Vineyard Boulevard.

<u>FEDERAL AGENCIES</u>	<u>PROVIDED COMMENTS</u>
Department of the Army	Yes
Department of Commerce, National Marine Fisheries Services.....	No
Department of the Interior, Fish & Wildlife Service	No
Department of Interior, U.S. Geological Survey	
Water Resources Division	Yes
U.S. Senate District Representative.....	No
 <u>STATE AGENCIES</u>	
Department of Accounting and General Services	Yes
Department of Education	Yes
Department of Health	Yes
Department of Land and Natural Resources,	
Office of Conservation and Environmental Affairs	Yes
Department of Land and Natural Resources,	
Division of Water Resource Management.....	No
Department of Land and Natural Resources,	
State Historic Preservation Division.....	Yes
Office of Environmental Quality Control.....	No
University of Hawaii, Environmental Center.....	Yes
 <u>CITY AND COUNTY AGENCIES</u>	
Board of Water Supply	No
Building Department	Yes
Department of Land Utilization	No
Planning Department	Yes
Department of Public Works.....	Yes
Department Transportation Services.....	Yes
Honolulu City Council No. 15	No
Honolulu Fire Department.....	Yes
Honolulu Police Department	Yes
 <u>ORGANIZATIONS AND INDIVIDUALS</u>	
Kokea Shopping Center	No
Liliha/Kapalama Neighborhood Board No. 14	No
The Nature Conservancy of Hawaii	Yes



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
FT. SHAFTER, HAWAII 96858-5440

ATTENTION OF

January 23, 1995

Planning Division

RECEIVED
JAN 24 1995

STANLEY YIM & ASSOC., INC.
Time


Mr. Jason Yim
Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Dillingham Boulevard 42-Inch Water Main Project, Kalihi, Oahu. The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army (DA) permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

- a. A DA permit may be required for this project if any activity occurs in or around the Kapaemama Canal. Please contact our Regulatory Branch for further information at 438-9258 and refer to file number P093-012.
- b. The flood hazard information provided on page 1-1 of the environmental assessment is correct.

Sincerely,


Ray H. Jyo, P.E.
Director of Engineering

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

April 26, 1995

RECEIVED
MAY 1 1995

STANLEY YIM & ASSOC., INC.
Time

Mr. Ray H. Jyo, P.E.
Department of the Army
U. S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96858-5440

Dear Mr. Jyo:

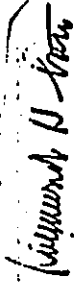
Subject: Your Letter of January 23, 1995 on the Draft Environmental Assessment (EA) for the Proposed Dillingham Boulevard 42-Inch Main from Kalihi Street to Vineyard Boulevard

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project.

We understand that the project will require a Department of the Army permit for activity occurring in or around the Kapaemama Canal.

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

Very truly yours,



RAYMOND H. SATO
Manager and Chief Engineer

cc: Jason Yim, Stanley Yim and Associates



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

WATER RESOURCES DIVISION
677 Ala Moana Boulevard, Suite 415
Honolulu, Hawaii 96813

January 26, 1995

Mr. Jason Yim
Stanley Yim and Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

The staff of the U.S. Geological Survey, Water Resources Division, has reviewed the subject Draft Environmental Assessment (DEA), and we have no comments to offer at this time.

Thank you for allowing us to review the DEA. We are returning it to your office for your future use.

Sincerely,

William Meyer
William Meyer
District Chief

Enc.

RECEIVED
JAN 30 1995

STANLEY YIM & ASSOC., INC.
Time

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

April 18, 1995

RECEIVED
APR 21 1995

STANLEY YIM & ASSOC., INC.
Time

Mr. William Meyer
District Chief
United States Department of the Interior
U. S. Geological Survey
Water Resources Division
677 Ala Moana Boulevard, Suite 415
Honolulu, Hawaii 96813

Dear Mr. Meyer:

Subject: Your Letter of January 26, 1995 on the Draft Environmental Assessment (EA) for the Proposed Dillingham Boulevard 42-Inch Main from Kalihii Street to Vineyard Boulevard

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-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.

Very truly yours,

Raymond H. SATO

RAYMOND H. SATO
Manager and Chief Engineer

cc: Jason Yim, Stanley Yim and Associates

Mr. G
JK



BENJAMIN J. CATI AND
GOVERNOR

DORIS S. MAI
COMPTROLLER
MARY PATRICKA WATERHOUSE
DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
1,000 BUSH ST., HONOLULU, HAWAII 96813
LITR# NO. (P) 1050.5

April 19, 1995

JAN 31 1995

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

Stanley Yim and Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Gentlemen:

Subject: Dillingham Boulevard 42-Inch Water Main
Honolulu, Hawaii
Draft Environmental Assessment

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. Ralph Yukumoto of the Planning Branch at 586-0488.

Very truly yours,

Gordon Matsuoka
GORDON MATSUOKA
State Public Works Engineer

RY:jk

Subject: Your Letter of January 31, 1995 on the Draft Environmental Assessment (EA) for the Proposed Dillingham Boulevard 42-Inch Main from Kalihii Street to Vineyard Boulevard

Dear Mr. Matsuoka:

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project.

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

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

Very truly yours,

Raymond H. Sato

RAYMOND H. SATO
Manager and Chief Engineer

SM:rk
cc: R. Sato
B. Usegawa

PLAN-58/95

RECEIVED
FEB 1 1995

STANLEY YIM & ASSOC., INC.
T-100

BENJAMIN J. CAYetano
Assistant
Superintendent



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P O BOX 3382
HONOLULU, HAWAII 96819

January 25, 1995

OFFICE OF THE SUPERINTENDENT

Mr. Jason Yim
Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

SUBJECT: Draft Environmental Assessment
Dillingham Boulevard 42 inch Water Main
from Kalihl Street to Vineyard Boulevard

We have reviewed the subject assessment and have the following concerns about noise, dust, and traffic during the construction period. Kalihl-Kai Elementary School is adjacent to the proposed project site and will be impacted during the construction period.

The Department of Education (DOE) will require that the developer provide air-conditioning at no cost to the DOE for those classrooms impacted by noise and dust levels beyond the standards set by the Department of Health.

The developer should also provide advanced notice of construction plans to the school, Honolulu District, and inform the school's administration of the construction schedule. The parents, students, and staff must be informed and prepared for unexpected traffic delays or the rerouting of pedestrian or vehicular traffic next to the school.

Should there be any questions, please call the Facilities Branch at 733-4862.

Sincerely,

Herman M. Aizawa
Herman M. Aizawa, Ph.D.
Superintendent

HMA:jl

cc: Alfred K. Suga, Asst. Supt.
John P. Sosa, Honolulu Dist.

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FEB 7 1995

STANLEY YIM & ASSOC., INC.
Time

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

May 22, 1995

RECEIVED
MAY 26 1995

STANLEY YIM & ASSOC., INC.
Time

Herman M. Aizawa, Ph. D.
Department of Education
State of Hawaii
P. O. Box 2360
Honolulu, Hawaii 96804

Dear Dr. Aizawa:

Subject: Your Letter of January 25, 1995 on the Draft Environmental Assessment (EA) for the Proposed Dillingham Boulevard 42-inch Main from Kalihl Street to Vineyard Boulevard

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project. We have the following responses to your concerns:

1. The Board of Water Supply requires all construction work to comply with noise and dust limits set forth by the Department of Health. Should these limits be exceeded, the contractor will take the necessary steps to eliminate or mitigate the noise and dust impacts.
2. Traffic concerns near the school will be addressed with an approved traffic control plan.
3. Prior to the start of construction, a public notice will be published and all affected property owners will be notified.

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

Very truly yours,

Raymond H. Sato

RAYMOND H. SATO
Manager and Chief Engineer

cc: Mr. Jason Yim, Stanley Yim and Associates

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

MANAHI GIVING
DIVISION OF HEALTH



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 279
HONOLULU, HAWAII 96801

RECEIVED
JAN 19 1995

STANLEY YIM & ASSOC., INC.
Time

UNRECORDED
DIVISION OF HEALTH

IN COPY, PLEASE REFER TO:

December 14, 1991

TO: These Persons Requesting Comments on Land Use Documents

FROM: June Harrigan-Lum, Manager *June Harrigan-Lum*
Environmental Planning Office

SUBJECT: Temporary Discontinuance of Land Use Reviews

Because of the lack of funds and resources this year, we are not able to hire someone to coordinate our 1995 legislative activities. As a result, we are using one of our existing staff members to do this work on a full time basis during the legislative session.

The legislative coordinator selected, Mr. Art Bauckham, is also the person who was coordinating the land use reviews and responses. Therefore, starting on January 1, and continuing until May 1, 1995, the Environmental Planning Office (EPO) will not be accepting any land use documents for coordinated replies.

If you would like staff in a specific branch or office (for instance, the Wastewater Branch) to comment on your proposal, you are welcome to contact the staff directly. A list of the Branch/Office names are attached for your reference. If you have already sent a copy of the document to the EPO, and you wish to have us send it to a specific branch, you may call 586-4337 and ask the clerical staff to send it to the appropriate branch. Please describe the document and the date of your cover letter.

Remember, on May 1, 1995 we will again start preparing coordinated responses throughout the Environmental Health Administration.

Thank you for your cooperation and patience in this matter.

Re: Dillingham Blvd. 43 with Water Main
from Kalia Street to Vineyard Blvd.

Branches and Offices in the Environmental Health Administration

Hazard Evaluation and
Emergency Response-----586-4249
Environmental Planning Office--586-4337
Clean Air Branch-----586-4200
Clean Water Branch-----586-4309
Safe Drinking Water Branch-----586-4258
Office of Solid Waste Mgt.-----586-4240
Hazardous Waste Branch-----586-4226
Wastewater Branch-----586-4294
Noise and Radiation Branch-----586-4701
Sanitation Branch-----586-8000
Litter Control Office-----586-8400
Food and Drug Branch-----586-4725
Vector Control Branch-----831-6767

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU



COPY

BENJAMIN J. CAVETANO
Governor of the State



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. Box 621
Honolulu, Hawaii 96809

REF: OCEA:IKP

FILE NO.: 95-337
DOC. ID.: 5352

RECEIVED
NOV 27 1995
STANLEY YIM & ASSOCIATES, INC.

Lawrence Milke, M.D.
Director
Department of Health
State of Hawaii
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Milke:

Subject: Your Memorandum Dated December 14, 1991 on the Draft Environmental Assessment (DEA) for the Proposed Dillingham Boulevard 42-inch Main from Kalihii Street to Vineyard Boulevard

Thank you for reviewing the DEA for the proposed Dillingham Boulevard 42-inch transmission main project.

We understand that the DEA for the subject project has been sent to the Branches and Offices in the Environmental Health Administration for their review. We requested this action by phone on February 8, 1995 in response to your December 14 letter. Aside from the December 14 letter, we have received no additional comments.

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

Very truly yours,

RAYMOND H. SATO
Manager and Chief Engineer

cc: Jason Yim, Stanley Yim and Associates

Chairperson
MICHAEL D. WILSON
Board of Land and Natural Resources

Deputy Director
GILBERT COLOMA-AGARAN

Aquatic Resources
Aquatic Resources
Boating and Ocean Recreation
Bureau of Concessions
Conservation and Environmental Affairs
Forestry and Wildlife
Historic Preservation
Land Management
State Parks
Water and Land Development

RECEIVED
FEB 17 1995

STANLEY YIM & ASSOC., INC.
Time

Mr. Jason Yim
Stanley Yim & Associates, Inc.
2850 Koa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

SUBJECT: Draft Environmental Assessment (DEA): Dillingham Boulevard 42-inch Water Main, Honolulu, Oahu; TRKS: various

We have reviewed the DEA information for the subject project transmitted by your letter dated January 10, 1995, and have the following comments:

Division of Aquatic Resources


The Division of Aquatic Resources (DAR) comments that the applicant provides bits and pieces of information throughout the DEA. Options are suggested with no details of a preferred option. DAR cannot provide comments on a plan unless they understand exactly what the applicant intends to do, the process, including notes and boards, by which this would be done.

The applicant has made statements and drawn conclusions for the reviewers instead of providing solid information. For example, the applicant states that the result of their construction efforts will benefit various locations along the main route rather than providing data that would allow the reviewer to determine if the project would generate adverse impacts to the aquatic environment.

DAR requests that subsequent drafts and the final EA be submitted to DAR for further review and comments.

Commission on Water Resource Management

The Commission on Water Resource Management's (CWRM) staff comments that page 1-3 of the DEA acknowledges the need for a Stream Channel Alteration Permit (SCAP) should the project require alteration of the bed or banks of the streams.

 COPY

File No.: 95-337

- 2 -

Mr. J. Yim

Historic Preservation Division

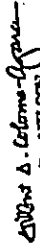
The Historic Preservation Division (HPD) comments that this project will have "no effect" on historic sites.

However, it is possible that historic sites, including human burials, will be uncovered during routine construction activities. Should this be the case, all work in the vicinity must stop and HPD must be contacted at 587-0047.

We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,


MICHAEL D. WILSON

May 31, 1995

RECEIVED
JUN 2 1995

STANLEY YIM & ASSOC., INC.
Title _____

Mr. Michael Wilson, Chairperson
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Your Letter of February 16, 1995 on the Draft Environmental Assessment (DEA) for the Proposed Dillingham Boulevard 42-Inch Main from Kallhi Street to Vineyard Boulevard

Thank you for reviewing the DEA for the proposed Dillingham Boulevard 42-inch transmission main project.

We have the following comments to your concerns:

Division of Aquatic Resources

The intent of the DEA is to disclose adverse impacts and suggest alternatives and mitigation to eliminate or minimize those impacts. We disagree with the Division of Aquatic Resources comments and feel that the DEA adequately identifies and discusses the pertinent aspects of this project. The DEA provides alternative canal crossing schemes to provide design and construction flexibility. The canal crossing design has not been completed to date.

The DEA states that there are no known rare or endangered species of flora or fauna within the project area. Due to previous industrial activity adjacent to the canal, the water quality in the canal is at degraded levels which has severely impacted aquatic biology. We acknowledge that aquatic life exists in the canal and mitigative measures will be implemented to minimize silt transport and maintain continuous stream flow.

We note that the Department of Land and Natural Resources will have further opportunity to review this project when construction plans are finalized and the Stream Channel Alteration Permit is submitted for review and approval.

COPY

Mr. Michael Wilson
Page 2
May 31, 1995

Commission on Water Resource Management

Should the pipeline crossing alter the stream bed or banks of the Kapalama Canal, a Stream Channel Alteration Permit will be submitted. We expect that alteration of the canal is unavoidable and adequate mitigation will be implemented.

Historic Preservation Division

We acknowledge that the proposed project will have "no effect" on any historic sites. If any historic sites, including human burials, are uncovered during construction, work in the vicinity will be halted and the State Historic Preservation Division will be contacted.

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

Very truly yours,

RAYMOND H. SATO
Manager and Chief Engineer

✓cc: Jason Yim, Stanley Yim and Associates

BENJAMIN J. CAFFARO
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
31 SOUTH KING STREET, EIGHTH FLOOR
HONOLULU, HAWAII 96813

January 19, 1995

Jason Yim
Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

SUBJECT: Draft Environmental Assessment (DEA), Dillingham Boulevard 42"
Water Main from Kaihii Street to Vineyard Boulevard
Kapalama and Honolulu, Kona, O'ahu
TMK: 1-5, 1-7

LOG NO: 13688 ✓
DOC NO: 9503TD09

Thank you for the opportunity to review this DEA, which includes our May 12, 1994, determination that this project will have "no effect" on historic sites.

It is possible that historic sites, including human burials, will be uncovered during routine construction activities. Should this be the case all work in the vicinity must stop and the Historic Preservation Division must be contacted at 587-0047.

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

TD:jk

RECEIVED
JAN 20 1995

STANLEY YIM & ASSOC., INC.

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

April 18, 1995

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Dear Mr. Hibbard:

Subject: Your Letter of January 19, 1995 on the Draft Environmental Assessment (EA) for the Proposed Dillingham Boulevard 42-Inch Main from Kalihii Street to Vineyard Boulevard

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project.

We acknowledge your determination that the proposed project will have no effect on any historic sites.

In the unlikely event that historic sites, including human burials are uncovered during routine construction activities, all work in the vicinity will be stopped and the Historic Preservation Division will be contacted.

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

Very truly yours,

RAYMOND H. SATO
Manager and Chief Engineer

cc: Jason Yim, Stanley Yim and Associates

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APR 21 1995

STANLEY YIM & ASSOC., INC.
Time



University of Hawaii at Mānoa

Environmental Center
A Unit of Water Resources Research Center
Crawford 317 • 2530 Campus Road • Honolulu, Hawaii 96822
Telephone: (808) 956-7361 • Facsimile: (808) 956-3889

RECEIVED
MAR 29 1995

March 25, 1995
EA :00113

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

Dear Mr. Usagawa:

Dillingham Boulevard 42-Inch Water Main
From Kalihii Street to Vineyard Boulevard
Honolulu, Hawaii

The Board of Water Supply proposes to construct a 42-inch water transmission main along Dillingham Boulevard and Liliha Street. The proposed water main will begin at the intersection of Kalihii and Dillingham and follow Dillingham Boulevard and Liliha Street until it connects to another 42-inch water main at Vineyard Boulevard. The dual purposes of the project are to (1) provide a greater continuity of flow to the Honolulu area, and (2) to increase the overall transmission capacity to the Honolulu service area.

We reviewed the Draft Environmental Assessment with the assistance of George Taoka, Civil Engineering; and Paul Berkowitz of the Environmental Center.

Traffic Impacts

In general, since the proposed project lies in an already urbanized region, the environmental consequences are benign; however we are concerned about the temporary impacts on traffic flow on Dillingham Boulevard. The document fails to emphasize how severe traffic congestion will be during construction.

Even without any construction or closed lanes, Dillingham Boulevard is a busy road. Since the utilities lie underneath the center of the road on public property, it is inevitable that the center two lanes will be blocked off during the construction phase. With 50% of the road closed and merging precluded, traffic capacity will be reduced to 40% of the present value. Furthermore, parking on Dillingham Boulevard will probably be eliminated.

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

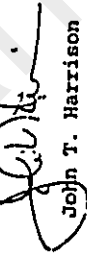
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Conclusion

In short, the temporary impacts on traffic will be horrendous; however, our reviewers felt that if the water main is going to be constructed in that location, these effects are unavoidable. In the section which considers project alternatives, the document only considers the no-action option. Were any alternative sites considered? Is it possible to place the water main in a location which would create less traffic congestion during construction?

Thank you for the opportunity to review this Draft EA.

Sincerely,


John T. Harrison

cc: OEQC
Jason Yim
Roger Fujioka
George Taoka
Paul Berkowitz

May 16, 1995

Mr. John T. Harrison
Environmental Center
University of Hawaii
Crawford 317
2550 Campus Road
Honolulu, Hawaii 96822

Dear Mr. Harrison:


Subject: Your Letter of March 25, 1995 on the Draft Environmental Assessment (EA) for the Proposed Dillingham Boulevard 42-Inch Main from Kalihii Street to Vineyard Boulevard

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project. We provide the following comments:

1. Temporary traffic impacts during construction on Dillingham Boulevard is a major focus of the EA. Traffic impacts will be mitigated through an approved traffic control plan, public notification, and by limiting construction work from the hours of 8:30 a.m. to 3:30 p.m., on weekdays to avoid peak hour traffic. Parking along Dillingham Boulevard would not be impacted since it is presently not allowed. Although the project will be constructed in several phases, each phase will be completed prior to beginning the next phase to minimize traffic impacts.
2. The main installation from Kalihii Street toward downtown was deemed most appropriate along Dillingham Boulevard in terms of hydraulics and feasibility because it is an extension of the existing 42" main on Dillingham Boulevard from Nimitz Highway. Alternative alignment options such as Nimitz Highway and King Street would incur additional costs and create worse traffic problems and were therefore discarded very early in the assessment process.

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

Very truly yours,



RAYMOND H. SATO
Manager and Chief Engineer

cc: Mr. Jason Yim, Stanley Yim and Associates

RECEIVED

MAY 19 1995

STANLEY YIM & ASSOC., INC.

BUILDING DEPARTMENT
CITY AND COUNTY OF HONOLULU
HONOLULU MUNICIPAL BUILDING
430 SOUTH KING STREET
HONOLULU, HAWAII 96813



RANDALL K. FUJIKI
DIRECTOR AND BUILDING SUPERINTENDENT
NORMAN BOGNER
ASST. DIRECTOR AND BUILDING SUPERINTENDENT

PB 95-128

February 24, 1995

RECEIVED
MAR 01 1995

STANLEY YIM & ASSOC., INC.
Time

Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Gentlemen:

Subject: Draft Environmental Assessment (DEA) for
the Dillingham Boulevard 42 inch Main
from Kalihi Street to Vineyard Boulevard

We have reviewed the DEA for the subject project and have no
comments to offer. A verbal response was previously provided to
Mr. Jason Yim of your office.

Thank you for allowing us to review the document.

Very truly yours,

RANDALL K. FUJIKI
Director and Building Superintendent

cc: G. Tamashiro

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

April 19, 1995

RECEIVED
APR 21 1995

STANLEY YIM & ASSOC., INC.
Time

TO: RANDALL K. FUJIKI
DIRECTOR AND BUILDING SUPERINTENDENT
BUILDING DEPARTMENT

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

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 24, 1995 ON THE DRAFT
ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED DILLINGHAM
BOULEVARD 42-INCH MAIN FROM KALIHI STREET TO VINEYARD
BOULEVARD

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-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: Jason Yim, Stanley Yim and Associates

PLANNING DEPARTMENT

RECEIVED HONOLULU COUNTY OF HONOLULU

808 SOUTH KING STREET HONOLULU, HAWAII 96813

FEB 13 2 24 PM '95

RECEIVED BOARD OF WATER SUPPLY

FEB 14 1995



FILED MARKER

CHERYL D. SOON
ACTING CHIEF PLANNING OFFICER
CAREY T. TAKAHASHI
SENIOR CHIEF PLANNING OFFICER
ET 195-0038

February 10, 1995

MEMORANDUM

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

FROM: CHERYL D. SOON, ACTING CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (DEA), DILLINGHAM
BOULEVARD 42-INCH WATER MAIN FROM KALIHI STREET TO
VINEYARD BOULEVARD

This in response to Stanley Yim & Associates, Inc. letter dated January 10, 1995. We have reviewed the subject draft environmental assessment (DEA) and have the following comments to offer:

1. The project being proposed for the Dillingham Boulevard 42-inch water main from Kalihi Street to Vineyard Boulevard is consistent with the water system designation on the Primary Urban Center Development Plan Public Facilities Map (DPPFM).
2. Section 1.1 of the DEA states that the proposed 42-inch transmission main would provide a greater continuity of flow by providing parallel mains from Pearl Harbor-Halawa sources. It is our understanding that the existing main within Dillingham Boulevard is a 12-inch main and not a 42-inch main. Is a purpose of the project to provide redundancy in the water system of the area? The Final Environmental Assessment (FEA) should clarify this and briefly describe the major elements of the existing water main system in the area and its service area. The FEA should also include information as to the number of individuals the proposed 34 mgd will serve.

Raymond Sato, Acting Manager and
Chief Engineer
Board of Water Supply
February 10, 1995
Page 2

3. Section 2.1 of the DEA should be reworded to clearly state the proper designations near or adjacent to the proposed project area. The section should state: "Areas near and adjacent to the main are designated on the Development Plan as: Commercial; Commercial Emphasis Mixed Use; Commercial - Industrial Emphasis Mixed Use; Industrial; Residential; Residential Emphasis Mixed Use; Public and Quasi - Public; Parks and Recreation; Low Density Apartment, and Medium Density Apartment."

4. Section 3.1 of the DEA states that, "Users in the Honolulu area would be subject to loss of water should a break occur in the existing 42-inch main on Vineyard Boulevard." If the proposed 42-inch main is connected to the existing 42-inch main on Vineyard Boulevard, how would this new 42-inch main prevent any service loss during main breaks as stated in Section 3.1.

Should you have any questions, please contact Eugene Takahashi of our staff at 527-6022.

Cheryl D. Soon
CHERYL D. SOON
Acting Chief Planning Officer

CDS:lh

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF HONOLULU
440 SOUTH KING STREET
HONOLULU HAWAII



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MAY 15 1995

KENNETH SPRAGUE
Acting DIRECTOR AND CHIEF ENGINEER
DARWIN J. HAWARD
Acting DIRECTOR
ENV 85-040

TO: CHERYL D. SOON, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

STANLEY YIM & ASSOC., INC.
Tmk

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

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 10, 1995 ON THE DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED DILLINGHAM BOULEVARD 42-INCH MAIN FROM KALII STREET TO VINEYARD BOULEVARD

February 10, 1995

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FEB 12 1995
STANLEY YIM & ASSOC., INC.
Tmk

Mr. Jason Yim
Stanley Yim and Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project. We have the following comments to your concerns:

1. We acknowledge that the proposed project is consistent with the water system designation on the Primary Urban Center Development Plan Public Facilities Map.
2. The primary purpose of the proposed project is to increase the overall transmission capacity from the Pearl Harbor area to the Honolulu service area. The existing main within Dillingham Boulevard is a 12-inch main which provides distribution water service to the immediate vicinity. The 42-inch main will provide transmission capacity to areas beyond the Dillingham area, ultimately serving Downtown Honolulu, the waterfront, and Waikiki. The design carrying capacity of the proposed 42-inch main is 37 million gallons per day. The design criteria of transmission mains is based on peak hour demand for the entire integrated water system rather than by the number of individuals served.
3. Section 2.1 of the Draft EA will be revised accordingly to include the accepted terminology for the land use designations of areas adjacent to the proposed project.
4. The new 42-inch main also provides a reliable back-up in the event of a main break in the existing north trunk 42-inch main west of the Liliha Street and Vineyard Boulevard intersection.

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

cc: Jason Yim, Stanley Yim and Associates

Subject: Draft Environmental Assessment (DEA)
Dillingham Boulevard 42 Inch Water Main
Tax Map Key: 1-5- and 7

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

1. Please clarify the 100-year storm water surface.
2. How far below canal invert will jacketed water main be placed?
3. Maintain half of the canal (upstream and downstream) dammed during the period of construction.
4. Comments received from the public indicate that the water line bridge at McCully Street bridge is "too boxy".
5. If there is discharge into the City drainage system, a City dewatering permit will be required.
6. On Page 1-6, address water quantity anticipated to be discharged during testing.
7. Construction within City right-of-way should be in accordance with City standards and Americans with Disabilities Act.

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

Very truly yours,

Kenneth E. Sprague
FOR KENNETH E. SPRAGUE
Acting Director and Chief Engineer

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

RECEIVED
MAY 6 1995

May 5, 1995

43

TO: KENNETH E. SPRAGUE, DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF PUBLIC WORKS
STANLEY YIM & ASSOC., INC.

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

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 10, 1995 ON THE DRAFT
ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED DILLINGHAM
BOULEVARD 42-INCH MAIN FROM KALIHI STREET TO VINEYARD
BOULEVARD

Thank you for reviewing the Draft Environmental Assessment for the proposed
Dillingham Boulevard 42-inch transmission main project. We have the following
comments to your concerns:

1. The project area is designated Zone X on the Flood Insurance Rate map where the project is outside of the 500-year flood plain. The 100-year storm water surface, if required, can be provided at the design phase of the project.
2. If the main is installed below the canal, the depth of the main below the canal invert will be determined during the project's design phase maintaining full channel flow capacity. Construction plans indicating the established profile will be submitted for your review and approval.
3. We will construct one half of the canal crossing at a time to maintain drainage capacity and allow aquatic biota unobstructed passage.
4. Visual concerns of an over-canal crossing will be evaluated during the design phase.
5. We acknowledge that a City dewatering permit and a discharge of effluent permit will be obtained if there is any discharge into the City drainage system.
6. Water quantity to be discharge during hydrotesting will be approximately 644,000 gallons for Phase 1; 730,000 gallons for Phase 2; and 1,285,000 gallons for Phase 3.

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

Mr. Kenneth E. Sprague
Page 2
May 5, 1995

7. Construction within the City right-of-way will be in accordance with the City standards and Americans with Disabilities Act.

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

cc: Mr. Jason Yim, Stanley Yim and Associates

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU

PACIFIC CENTER PLAZA
711 KAPAHULU BOULEVARD, SUITE 1200
HONOLULU, HAWAII 96813



JEREMY MARRIS
DIRECTOR

CHARLES O. SWANSON
DIRECTOR

TE-108
PL95.1.012

February 6, 1995

Mr. Jason Yim
Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Dillingham Boulevard 42-inch Water Main
Kalihi Street to Vineyard Boulevard
Draft Environmental Assessment (EA)
THK: 1-5 and 1-7

This is in response to your letter dated January 10, 1995
requesting our comments on the subject draft EA.

Based on our review, we have no objections to the proposed
project at this time. Construction plans, along with a traffic
control plan for all work within the city's right-of-way should
be submitted to our department for review.

Should you have any questions, please contact Lance Watanabe of
my staff at 523-4199.

Respectfully,

Charles O. Swanson
CHARLES O. SWANSON
Director

RECEIVED
FEB 8 1995

STANLEY YIM & ASSOC., INC.
Time

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU



COPY

April 26, 1995

TO: CHARLES O. SWANSON, DIRECTOR
DEPARTMENT OF TRANSPORTATION SERVICES

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

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 6, 1995 ON THE DRAFT
ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED
DILLINGHAM BOULEVARD 42-INCH MAIN FROM KALIHI STREET TO
VINEYARD BOULEVARD

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch
transmission main project.

We acknowledge that you have no objections to the proposed project. We will submit
construction plans, along with a traffic control plan for all work within the City's right-
of-way, for your review and approval.

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

cc: Jason Yim, Stanley Yim and Associates

RECEIVED
MAY 3 1995

STANLEY YIM & ASSOC., INC.
Time

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU
333 KALANIANA'OLA STREET, SUITE 200
HONOLULU, HAWAII 96819



RICHARD SETO-MOOK
FIRE CHIEF
FIRE DEPARTMENT

February 21, 1995

Mr. Jason Yim
Stanley Yim and Associates
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

Subject: Draft Environmental Assessment
Dillingham Boulevard, 42-Inch Water Main
from Kalih Street to Vineyard Boulevard

We have reviewed the application and made an on-site assessment of the subject project, and have no objections to the proposal providing the following conditions are complied with before approval:

1. Fire apparatus access shall be maintained throughout the project.
2. All appurtenances, hydrant spacing, and flow requirements of the water system shall meet the Board of Water Supply standards.

Should additional information or assistance be required, please call Acting Captain Stephen Kishida of our Fire Prevention Bureau at 523-4186.

Very truly yours,

Richard K. Seto-Mook
RICHARD R. SETO-MOOK
Acting Fire Chief

SK:ey

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FEB 28 1995
STANLEY YIM & ASSOC., INC.
FIRE

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

April 26, 1995

RECEIVED
MAY 1 1995

TO: ANTHONY J. LOPEZ, JR., FIRE CHIEF
FIRE DEPARTMENT
STANLEY YIM & ASSOC., INC.
FIRE

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

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 21, 1995 ON THE DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED DILLINGHAM BOULEVARD 42-INCH MAIN FROM KALIH STREET TO VINEYARD BOULEVARD

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project. We have the following comments:

1. Fire apparatus access shall be maintained throughout the project.
2. All appurtenances, hydrant spacing, and flow requirements of the water system shall meet Board of Water Supply standards.

If you have any questions, please contact Barry Usagawa at 527-5255.

cc: Jason Yim, Stanley Yim and Associates

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERTANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 528-3111



JEREMY HARRIS
MAYOR

OUR REFERENCE BS-DL

MICHAEL S. NAKAMURA
CHIEF
MARIO M. KAWASAKI
DEPUTY CHIEF

February 15, 1995

RECEIVED
FEB 21 1995
STANLEY YIM & ASSOC., INC.
Time

Mr. Jason Yim
Stanley Yim and Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim:

This is in response to your letter of January 10, 1995, requesting for comments on a Draft Environmental Assessment for the Dillingham Boulevard 42-inch water main project.

We note the mitigative measures planned to alleviate traffic problems associated with the project. We also note the plans to notify police of construction activities and to keep safe passable routes open in the area. These measures should minimize impacts on the public and on the operations of our department.

We have no additional comments to make at this time. Thank you for the opportunity to review this document.

Sincerely,

MICHAEL S. NAKAMURA
Chief of Police

By *Eugene Ventura*
EUGENE VENTURA, Assistant Chief
Administrative Bureau

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

April 26, 1995

RECEIVED
MAY 1 1995
STANLEY YIM & ASSOC., INC.
Time

TO: MICHAEL S. NAKAMURA, CHIEF
POLICE DEPARTMENT

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

SUBJECT: YOUR MEMORANDUM OF FEBRUARY 15, 1995 ON THE DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE PROPOSED DILLINGHAM BOULEVARD 42-INCH MAIN FROM KALHI STREET TO VINEYARD BOULEVARD

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project.

We acknowledge that you have no objections to the proposed project. Mitigative measures will be implemented to alleviate traffic problems associated with the project's construction.

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

cc: Jason Yim, Stanley Yim and Associates



1100 KALANIAN'OLELI DR. SUITE 200 • HONOLULU, HAWAII 96813 • TEL: 808-537-4508 • FAX: 808-537-4519

Jason Yim
Stanley Yim & Associates
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Mr. Yim,

Thank you for allowing us review your draft EA for the Dillingham Boulevard Water Main report. At this time our database shows that there is no new locations of rare and or endangered species within your project area.

If you have further questions or other projects, please call me at 537-4508. Thank you for using the Hawaii Natural Heritage Program.

Sincerely,

Roy Kam
Roy Kam
Database Coordinator

Mr. Tom Chappin
Mr. Tom Chappin
Mr. Tom Chappin
Mr. Tom Chappin
Mr. Tom Chappin

Samuel A. Cook
Samuel A. Cook
Samuel A. Cook
Samuel A. Cook
Samuel A. Cook

Joseph J. Edwards
Joseph J. Edwards
Joseph J. Edwards
Joseph J. Edwards
Joseph J. Edwards

Raymond H. Satoh
Raymond H. Satoh
Raymond H. Satoh
Raymond H. Satoh
Raymond H. Satoh

William H. Sato
William H. Sato
William H. Sato
William H. Sato
William H. Sato

International Headquarters, 1115 North Lynn Street, Arlington, Virginia 22209
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BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

COPY

April 26, 1995

RECEIVED
MAY 1 1995
STANLEY YIM & ASSOC., INC.
Time

Mr. Roy Kam
Database Coordinator
The Nature Conservancy of Hawaii
1116 Smith Street, Suite 201
Honolulu, Hawaii 96817

Dear Mr. Kam:

Subject: Your Letter of February 14, 1995 on the Draft Environmental Assessment (EA) for the Proposed Dillingham Boulevard 42-Inch Main from Kalihii Street to Vineyard Boulevard

Thank you for reviewing the Draft EA for the proposed Dillingham Boulevard 42-inch transmission main project.

We acknowledge that there are no rare or endangered species identified within the project area.

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

Very truly yours,

Raymond H. Satoh

RAYMOND H. SATO
Manager and Chief Engineer

cc: Jason Yim, Stanley Yim and Associates

APPENDIX A

DEPARTMENT OF THE ARMY

**NATIONWIDE PERMIT
RULES, REGULATIONS & CONDITIONS**

be a duplication of reporting systems since the Corps is presently notified of pending NPDES permit applications. Of these commenters, one also objected to the DE's ability to add conditions without division approval.

Many commenters objected to the proposed revisions for this NWP. The stated concerns included: a lack of ciling criteria, no design specifications for the outfall structure itself, or associated construction methodologies; reliance on NPDES regulation is inappropriate since it focuses primarily on impacts associated with effluent, and does not satisfactorily review activities subject to section 404 regulations; application of the section 404(b)(1) Guidelines should be required since they are not addressed under NPDES regulations. Further, concern was expressed over impacts relating to structures, fills, and effluent discharges into special aquatic sites.

We believe that the incorporation of special design criteria for outfall structures in the NWP would be impractical, due to the variability in the size of structures, preparatory work required and construction materials utilized. However, the concerns raised by these comments can be addressed through the required notification procedure at § 330.1(e). Under the notification procedure the DE will ensure that the activity complies with the terms and conditions of the NWP and further, that the adverse impacts on the aquatic environment, and other aspects of the public interest are individually and cumulatively minimal. It is the responsibility of EPA pursuant to section 402 of the Clean Water Act to regulate the effluent of outfall structures. The Corps has responsibility for those activities associated with the construction of these structures. These activities can be effectively regulated by this NWP through the notification procedure, which does address construction impacts to special aquatic sites. We have considered all comments received in response to this nationwide permit and have retained the wording as proposed.

8. Oil and Gas Structures: Many commenters objected to this NWP on the basis of general environmental concerns associated with oil drilling structures. Others suggested that this NWP not apply in sensitive areas such as wetlands, riverbeds, mudflats, and marine sanctuaries. One commenter supported this NWP but suggested that notification procedures be implemented.

This NWP authorizes oil and gas structures only within areas leased for such purposes by the Department of Interior, Minerals Management Service. In addition to the Corps NEPA

documentation for this NWP, the Service prepares NEPA documentation before issuing a lease which also addresses the environmental impacts of oil drilling. In accordance with 33 CFR 322.5(f), the Corps review is limited to the effects on navigation and national security. Consistent with this review we are therefore retaining the proposed wording of the paragraph to exclude established danger zones and Corps/EPA Dredged Material Management Areas.

9. Structures in Fleeting and Anchorage Areas: Two commenters inquired whether "structures" include filling activities under section 404 authority. Only section 10 structures which do not involve filling activities are authorized by this NWP. Other NWPs (i.e. NWP 18, NWP 25, etc.) may be applicable if the terms and conditions of those NWPs are met. One commenter asked if NWP 9 applied to established or proposed to be established fleeting or anchorage areas. NWP 9 applies to all fleeting or anchorage area that have been established by the U.S. Coast Guard. One commenter expressed concern that no limits were proposed on the size and design of the structures. We disagree that size and design limits are needed. NWP General Condition 1, Navigation, will not allow any structures that would cause more than a minimal adverse effect on navigation.

10. Mooring Buoys: Two commenters suggested that restrictions be placed on water depths and type of anchors to be used under this NWP. Another commenter listed specific sensitive regional areas that should be excluded from the NWP or have mooring limits established. Two commenters expressed concerns about cumulative impacts from the installation and/or use of mooring buoys. Comments regarding specific areas that should be excluded or other special restrictions that are needed to protect special areas such as shellfish beds or submerged aquatic vegetation can, and should, be more appropriately dealt with by the addition of regional conditions. Based on our experience, we do not anticipate that the mooring buoys and anchorage systems will have more than minimal adverse effects either individually or cumulatively.

11. Temporary Recreational Structures: Several commenters suggested that the terms "temporary" and "seasonal" should be replaced with a specific time limitation and that the size of structures be more clearly defined. Several commenters favored excluding the use of the NWP in shallow water areas or vegetated shallows. Two commenters recommended that the NWP be used only for discrete events.

Two commenters expressed concerns about navigation safety and with other water related recreation. Several commenters indicated that state approval must be obtained for these structures. We disagree with the approach of placing time limitations on temporary or seasonal structures because of the seasonal variations for recreation from region to region. Regional conditions can be developed for the NWP and/or District Engineers may use discretionary authority on a case-by-case basis if duration, structure size or location require such action. Limiting the NWP to discrete events would greatly reduce its utility. In appendix A to part 330, general condition C. 1 states that no activity may cause more than a minimal adverse effect on navigation. Section 330.4(b)(2) states that NWPs do not obviate the need to obtain other Federal, state, or local authorizations required by law.

12. Utility Line Backfill and Bedding: We are clarifying that this NWP does not apply to tile or similar drainage works (although it does apply to pipes conveying drainage collected from another area) and that material resulting from trench excavation can be temporarily sidecast into waters of the United States, provided there is little or no flow to disperse the excavated material. Also all exposed slopes and streambanks must be stabilized immediately upon completion of the utility line. In addition, the area of waters of the United States that can be disturbed must be limited to the minimum necessary to construct the utility line. We have received frequent questions as to whether this NWP was restricted to crossing-type situations, as is typically the case in NWP 14. There is nothing in the language of the NWP to restrict use of this NWP to crossings, nor was there any intention to do so. Adverse environmental effects will be minimized by compliance with the terms and conditions of the NWP, including the requirement to restore the area to its preconstruction contours and the requirements to avoid and minimize discharges of dredged or fill material to the maximum extent practicable. Furthermore, in wetlands the top 6" to 12" of the trench should generally be backfilled with topsoil from the trench.

Many commenters objected to the six months that sidecast material may remain in waters of the United States and suggested shorter periods ranging from 14 to 60 days. We considered that these suggestions have some validity and have reduced temporary sidecasting to three months. Furthermore, considering the variation in terrain

conditions throughout the country we encourage the DEs to further address this issue, as appropriate, with a regional condition.

Many commenters requested that a PDN should be required for this NWP based on the fact that these could be major projects affecting large areas of wetlands of varied types with the potential for significant impacts to fish and wildlife, endangered species, or water quality.

We believe that major utility lines will have little opportunity to escape our notice and this fact will allow the DE to assert discretionary authority, where appropriate. This will minimize the type of losses described by the commenters. This would also apply to several comments requesting a limit on the size/length of the project that may be considered under this NWP.

Several commenters noted the potential for a french drain effect caused by backfill being more permeable than the native soil which may drain wetlands. This appears to be a valid concern. However, we believe this condition would be controlled through normal construction techniques. Further, this condition should normally cease after the disturbed soils have an opportunity to settle and compact. It should be further noted that this problem as well as other difficult soil management characteristics will vary throughout the country and can be easily addressed by regional conditions, if necessary.

Several commenters suggested that sidestepping in special aquatic sites be prohibited. We believe that the NWP, as written, has the effect of minimizing the adverse effects to special aquatic sites. This, combined with the ability of the DE to condition the NWP and assert discretionary authority, assures minimal impact.

Many commenters had concern over the requirements to replace the top 6" to 12" of topsoil. In approximately equal numbers they either considered it impractical to strip, store and retrieve this thin veneer of soil or they wished that at least a minimum of 12" should be replaced with even more stringent conditions for protecting stored soil material from erosion, dehydration etc. We believe that 6 to 12 inches is sufficient for restoration of a wetland condition. However, the permittee may replace more than 12 inches at his option.

Several commenters requested that this NWP be modified to include overhead utility lines. Overhead utility lines have traditionally been installed on towers or similar structures that do not involve discharges of dredged or fill

material into waters of the United States. However, discharges associated with the construction of such structures may be authorized by one, or more, other nationwide permits. To assure adequate evaluation of navigation and other factors of the public interest, we have not expanded this nationwide permit to include structures in Section 10 waters.

13. Bank Stabilization: Many commenters favored the expansion of the NWP 13, believing the environment was reasonably protected. However, some commenters were opposed to expanding the NWP 13. These commenters were concerned about piecemeal cumulative impacts, loss of materials, such as asphalt, car bodies, and trees, secondary impacts to adjacent upland riparian areas, and lack of need. Many commenters recommended that vegetative shoreline stabilization techniques be encouraged in lieu of bulkheads, while a few recommended that NWP 13 only allow the use of rip-rap. Some commenters recommended that more than 1 cubic yard of discharge and some sparse vegetation impacts be allowed, while others favored limiting the NWP 13 to less than 200 feet.

Shoreline stabilization devices and methods (e.g., bulkheads, seawalls, rip-rap, vegetative plantings) are typically constructed to prevent the loss of upland property from erosion. However, the rate of erosion can vary substantially from shoreline to shoreline. In some cases there may be no apparent erosion. In other cases there may be accretion. In low wave energy areas, wetland vegetation often exists and functions as a shoreline stabilizer and erosion prevention. In view of the above, we are retaining the proposed wording of the paragraph. The commenters' concerns should be alleviated by the terms and conditions which prohibit discharges in special aquatic sites, including wetlands, the use of unsuitable and toxic materials, and the requirement that the proposed stabilization be the minimum necessary. In some cases, where the impacts may be more than minimal (i.e., shorelines greater than 500 feet, and/or greater than 1 cubic yard per linear foot of shoreline), notification to the DE is required as per the general condition in part C (13). The intent is to accommodate a wide range of users, techniques and materials with minimal time delay and maximum protection of valuable wetland resources.

14. Road Crossing: Many commenters indicated that this NWP should be eliminated or reduced in scope for a number of reasons including the

following: it is not consistent with section 404(e) of the Clean Water Act, the section 404(b)(1) guidelines, and the mitigation MOA; should include notification for all crossings; lacks careful consideration of the term "single and complete project"; does not address low flows in the movement of aquatic organisms; lacks compensation for lost flood storage; a lack of resource agency review; cumulative and secondary impacts are not adequately addressed; and that it should include mitigation for all wetland acreage loss.

Several commenters expressed support for this NWP, stating that there should be no limit on the length or acreage of a crossing. They further indicated that mitigation should be required and that the delineation of special aquatic sites would be burdensome.

We have carefully considered these comments and have decided to modify this NWP to assure that projects authorized by this NWP have only minimal adverse effects on the environment. We have revised the language of this NWP to provide for the maintenance of low flow and the movement of aquatic organisms. The notification procedures have been revised to include a review by the appropriate resource agencies. Based upon our evaluation of this NWP, we believe it is consistent with the Clean Water Act.

15. U.S. Coast Guard Approved Bridges: Several commenters expressed concern over the absence of limits on the size of fills that may be addressed by this NWP. Based on the requirement for notification on this NWP and the ability of the DE to assert discretionary authority should the nature of the impacts warrant, it was decided not to impose such limits.

The resource agencies should be included in the notification process. This has been changed to include the resource agencies in the notification process.

Several commenters expressed concern over the inclusion of approach fills in this NWP. It was our belief that the Coast Guard permit process combined with the DE's independent review of the required notification would provide adequate safeguards and ensure minimization of impacts to special aquatic sites. However, upon further consideration, we believe that given the potential impacts of some approach fills it is more appropriate to conduct an individual permit review. Accordingly, approach fills have been deleted from NWP 15.

activities associated with the restoration of altered and degraded non-tidal wetlands, riparian areas and creation of wetlands and riparian areas on U.S. Forest Service and Bureau of Land Management lands, Federal surplus lands (e.g., military lands proposed for disposal), Farmers Home Administration inventory properties, and Resolution Trust Corporation inventory properties that are under Federal control prior to being transferred to the private sector. Such activities include, but are not limited to: installation and maintenance of small water control structures, dikes, and berms; backfilling of existing drainage ditches; removal of existing drainage structures; construction of small nesting islands; and other related activities. This nationwide permit applies to restoration projects that serve the purpose of restoring "natural" wetland hydrology, vegetation, and function to altered and degraded non-tidal wetlands and "natural" riparian areas. For agreement restoration and creation projects only, this nationwide permit also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its prior condition and use (i.e., prior to restoration under the agreement) within five years after expiration of the limited term wetland restoration or creation agreement, even if the discharge occurs after this nationwide permit expires. The prior condition will be documented in the original agreement, and the determination of return to prior conditions will be made by the Federal agency executing the agreement. Once an area is reverted back to its prior physical condition, it will be subject to whatever the Corps regulatory requirements will be at that future date. This nationwide permit does not authorize the conversion of natural wetlands to another aquatic use, such as creation of waterfowl impoundments where a forested wetland previously existed. (sections 10 and 404)

28. Modifications of Existing Marinas. Reconfigurations of existing docking facilities within an authorized marina area. No dredging, additional slips or dock spaces, or expansion of any kind within waters of the United States are authorized by this nationwide permit. (section 10)

29. Reserved

30. Reserved

31. Reserved

32. Completed Enforcement Actions. Any structure, work or discharge of dredged or fill material undertaken in accordance with, or remaining in place in compliance with, the terms of a final Federal court decision, consent decree,

or settlement agreement in an enforcement action brought by the United States under section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act of 1899. (sections 10 and 404)

33. Temporary Construction, Access and Dewatering. Temporary structures and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites; provided the associated permanent activity was previously authorized by the Corps of Engineers or the U.S. Coast Guard, or for bridge construction activities not subject to Federal regulation. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must be of materials and placed in a manner that will not be eroded by expected high flows. Temporary fill must be entirely removed to upland areas following completion of the construction activity and the affected areas restored to the pre-project conditions. Cofferdams cannot be used to dewater wetlands or other aquatic areas so as to change their use. Structures left in place after cofferdams are removed require a section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322). The permittee must notify the district engineer in accordance with the "Notification" general condition. The notification must also include a restoration plan of reasonable measures to avoid and minimize impacts to aquatic resources. The district engineer will add special conditions, where necessary, to ensure that adverse environmental impacts are minimal. Such conditions may include: limiting the temporary work to the minimum necessary; requiring seasonal restrictions; modifying the restoration plan; and requiring alternative construction methods (e.g. construction mats in wetlands where practicable). This nationwide permit does not authorize temporary structures or fill associated with mining activities or the construction of marina basins which have not been authorized by the Corps. (sections 10 and 404)

34. Cranberry Production Activities: Discharges of dredged or fill material for dikes, berms, pumps, water control structures or leveling of cranberry beds associated with expansion, enhancement, or modification activities at existing cranberry production operations provided:

a. The cumulative total acreage of disturbance per cranberry production operation, including but not limited to, filling, flooding, ditching, or clearing,

does not exceed 10 acres of waters of the United States, including wetlands;

b. The permittee notifies the District Engineer in accordance with the notification procedures; and

c. The activity does not result in a net loss of wetland acreage.

This nationwide permit does not authorize any discharge of dredged or fill material related to other cranberry production activities such as warehouses, processing facilities, or parking areas. For the purposes of this nationwide permit, the cumulative total of 10 acres will be measured over the period that this nationwide permit is valid. (section 404)

35. Maintenance Dredging of Existing Basins. Excavation and removal of accumulated sediment for maintenance of existing marina basins, canals, and boat slips to previously authorized depths or controlling depths for ingress/egress whichever is less provided the dredged material is disposed of at an upland site and proper siltation controls are used. (section 10)

36. Boat Ramps. Activities required for the construction of boat ramps provided:

a. The discharge into waters of the United States does not exceed 50 cubic yards of concrete, rock, crushed stone or gravel into forms, or placement of pre-cast concrete planks or slabs. (Unsuitable material that causes unacceptable chemical pollution or is structurally unstable is not authorized);

b. The boat ramp does not exceed 20 feet in width;

c. The base material is crushed stone, gravel or other suitable material;

d. The excavation is limited to the area necessary for site preparation and all excavated material is removed to the upland; and

e. No material is placed in special aquatic sites, including wetlands.

Dredging to provide access to the boat ramp may be authorized by another NWP, regional general permit, or individual permit pursuant to section 10 if located in navigable waters of the United States. (sections 10 and 404)

37. Emergency Watershed Protection and Rehabilitation. Work done by or funded by the Soil Conservation Service qualifying as an "exigency" situation (requiring immediate action) under its Emergency Watershed Protection Program (7 CFR part 624) and work done or funded by the Forest Service under its Burned-Area Emergency Rehabilitation Handbook (FSH 509.13) provided the district engineer is notified in accordance with the notification general

Nationwide Permit Conditions

General Conditions: The following general conditions must be followed in order for any authorization by a nationwide permit to be valid:

1. Navigation. No activity may cause more than a minimal adverse effect on navigation.
2. Proper maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.
3. Erosion and siltation controls. Appropriate erosion and siltation controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date.
4. Aquatic life movements. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water.
5. Equipment. Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize soil disturbance.
6. Regional and case-by-case conditions. The activity must comply with any regional conditions which may have been added by the Division Engineer (see 33 CFR 330.4(e)) and any case specific conditions added by the Corps.
7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the National Park Service and the U.S. Forest Service.
8. Tribal rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
9. Water quality certification. In certain states, an individual state water quality certification must be obtained or waived (see 33 CFR 330.4(c)).
10. Coastal zone management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see 33 CFR 330.4(d)).

11. Endangered species. No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or critical habitat might be affected or is in the vicinity of the project and shall not begin work on the activity until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. Fish and Wildlife Service and National Marine Fisheries Service (see 33 CFR 330.4(f)).

12. Historic properties. No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR 325, appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)).

13. Notification.

(a) Where required by the terms of the NWP, the prospective permittee must notify the District Engineer as early as possible and shall not begin the activity:

(1) Until notified by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or

(2) If notified by the District or Division Engineer that an individual permit is required; or

(3) Unless 30 days have passed from the District Engineer's receipt of the notification and the prospective permittee has not received notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) The notification must be in writing and include the following information and any required fees:

(1) Name, address and telephone number of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s) or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity;

(4) Where required by the terms of the NWP, a delineation of affected special aquatic sites, including wetlands; and

(5) A statement that the prospective permittee has contacted:

(i) The USFWS/NMFS regarding the presence of any Federally listed (or proposed for listing) endangered or threatened species or critical habitat in the permit area that may be affected by the proposed project; and any available information provided by those agencies. (The prospective permittee may contact Corps District Offices for USFWS/NMFS agency contacts and lists of critical habitat.)

(ii) The SHPO regarding the presence of any historic properties in the permit area that may be affected by the proposed project; and the available information, if any, provided by that agency.

(c) The standard individual permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PDN and must include all of the information required in (b)(1)-(5) of General Condition 13.

(d) In reviewing an activity under the notification procedure, the District Engineer will first determine whether the activity will result in more than minimal individual or cumulative adverse environmental effects or will be contrary to the public interest. The prospective permittee may, at his option, submit a proposed mitigation plan with the pre-discharge notification to expedite the process and the District Engineer will consider any optional mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed work are minimal. The District Engineer will consider any comments from Federal and State agencies concerning the proposed activity's compliance with

the terms and conditions of the nationwide permits and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. The District Engineer will, upon receipt of a notification, provide immediately (e.g. facsimile transmission, overnight mail or other expeditious manner) a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, EPA, and, if appropriate, the National Marine Fisheries Service. With the exception of NWP 37, these agencies will then have 5 calendar days from the date the material is transmitted to telephone the District Engineer if they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 10 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects are minimal, he will notify the permittee and include any conditions he deems necessary. If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he will notify the applicant either:

(1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; or

(2) That the project is authorized under the nationwide permit subject to the applicant's submitting a mitigation proposal that would reduce the adverse effects to the minimal level. This mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee elects to submit a mitigation plan, the District Engineer will expeditiously review the proposed mitigation plan, but will not commence a second 30-day notification procedure. If the net adverse effects of the project (with the mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant informing him that the project can proceed under the terms and conditions of the nationwide permit.

(e) Wetlands delineations. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 30-day period will not start until the wetland delineation has been completed.

(f) Mitigation. Factors that the District Engineer will consider when determining the acceptability of appropriate and practicable mitigation include, but are not limited to:

(1) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of overall project purposes;

(2) To the extent appropriate, permittees should consider mitigation banking and other forms of mitigation including contributions to wetland trust funds, which contribute to the restoration, creation, replacement, enhancement, or preservation of wetlands.

Furthermore, examples of mitigation that may be appropriate and practicable include but are not limited to; reducing the size of the project; establishing buffer zones to protect aquatic resource values; and replacing the loss of aquatic resource values by creating, restoring, and enhancing similar functions and values. In addition, mitigation must address impacts and cannot be used to offset the acreage of wetland losses that would occur in order to meet the acreage limits of some of the nationwide permits (e.g. 5 acres of wetlands cannot be created to change a 6 acre loss of wetlands to a 1 acre loss; however, the 5 created acres can be used to reduce the impacts of the 6 acre loss).

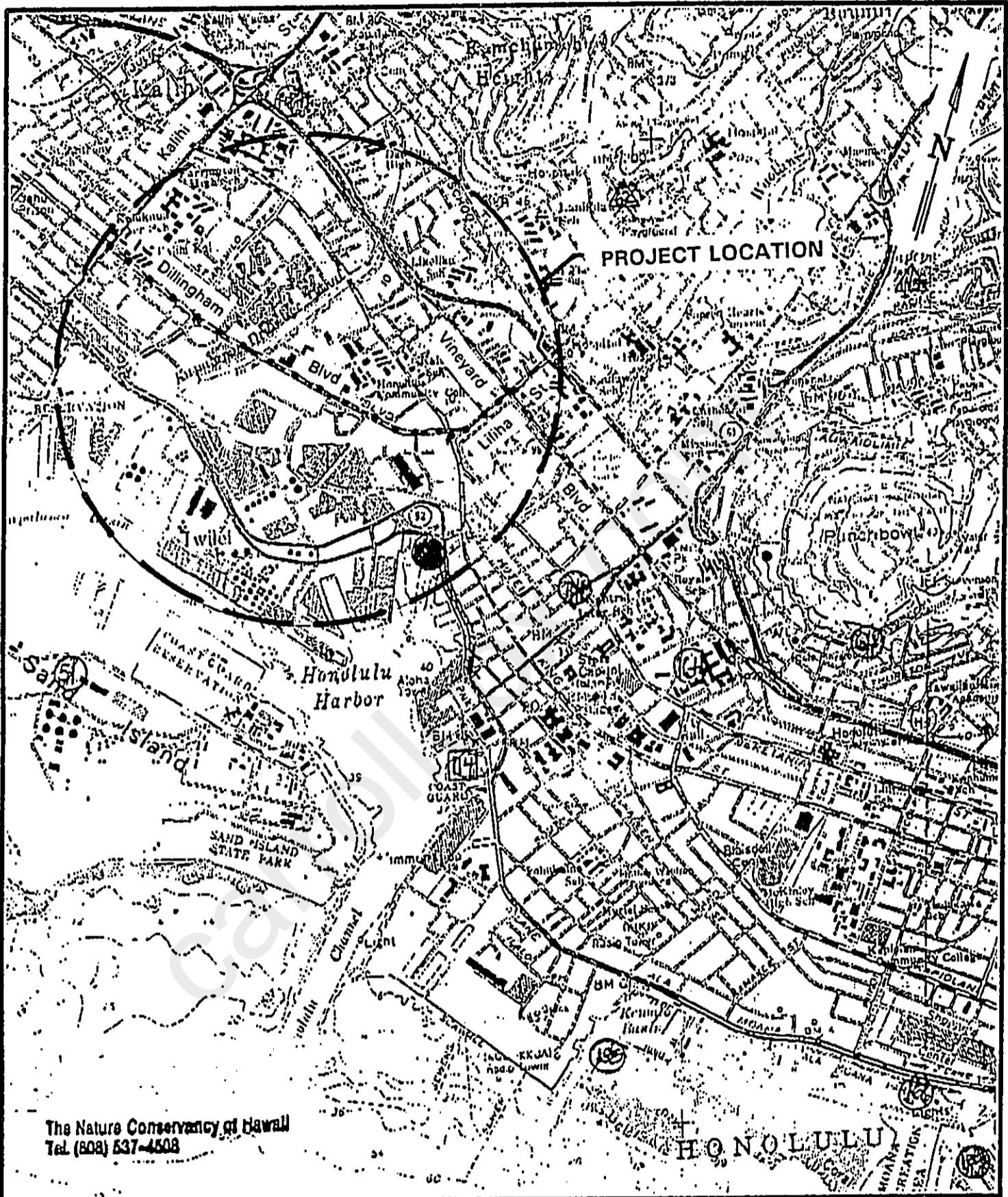
APPENDIX B

THE NATURE CONSERVANCY OF HAWAII

**U.S. DEPT. OF THE INTERIOR
FISH AND WILDLIFE SERVICE**

**U.S. DEPT. OF COMMERCE
NATIONAL MARINE FISHERIES SERVICE**

FLORA AND FAUNA



The Nature Conservancy of Hawaii
Tel. (808) 537-4508

DILLINGHAM BOULEVARD 42-INCH WATER MAIN
FROM KALIHĪ STREET TO VINEYARD BOULEVARD

Board of Water Supply
City and County of Honolulu

Figure B-1

THE NATURE CONSERVANCY OF HAWAII
HAWAII NATURAL HERITAGE PROGRAM
SIGNIFICANT FLORA AND FAUNA SIGHTINGS

FROM: KONICA FAX

TO:

808 833 4764

AUG 22, 1989

8:39AM

P.02

Notice

The Nature Conservancy's Hawaii Natural Heritage Program database is dependent on the research and observations of many scientists and individuals. In most cases this information is not the result of comprehensive site-specific field surveys, and is not confirmed by the Heritage staff. Many areas in Hawaii have never been thoroughly surveyed, and new plants and animals are still being discovered. Database information should never be regarded as final statements or substituted for on-site surveys required for environmental assessments. Data provided by the Heritage Program do not represent a position taken by The Nature Conservancy of Hawaii. Heritage information is only for the intended use of the individual or organization who requested it. It may not be distributed in any way without the consent of the Hawaii Natural Heritage Program.

Please cite the Heritage Program and primary sources in all documentation and reports.

Hawaii Natural Heritage Program, 1116 Smith St. Suite 201, Honolulu, HI 96817



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Ecoregion
300 Ala Moana Blvd, Room 6307
P.O. Box 50167
Honolulu, Hawaii 96850

In Reply Refer To: DLB

Ms. Lynette Marutani
Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

15 AUG 1994

Dear Ms. Marutani:

The U.S. Fish and Wildlife Service (Service) has received your August 1, 1994, letter requesting a list of Federally endangered, threatened, proposed, and candidate species that may be present within the proposed project area between Kalihi Street and Vineyard Boulevard on the island of Oahu, Hawaii. The Board of Water Supply is planning to install a 42-inch-water main along Dillingham Boulevard and Liliha Street, a section of which will be routed under the Kapalama Canal. The Service offers the following comments for your consideration.

The Service has reviewed the material provided with your request and other pertinent information in our files, including maps prepared by the Hawaii Heritage Program of the Nature Conservancy. To the best of our knowledge, the only listed species that may be found in the project area is the threatened green sea turtle (*Chelonia mydas*). You should contact the National Marine Fisheries Service (Department of Commerce) for their comments concerning potential impacts to green sea turtles found in nearshore waters. You should also be aware that the mudflats in Ke'ehi Lagoon, which is located adjacent to the project area, are a major staging area for migratory shorebirds.

We appreciate your concern for endangered species and look forward to reviewing any environmental documents associated with the Dillingham Boulevard Water Main project. If you have questions concerning our comments, please contact our Branch Chief for Interagency Cooperation, Ms. Margo Stahl, or Fish and Wildlife Biologist Diane Bowen at 808/541-2749.

Sincerely,

for, Haeruw Rosa
Brooks Harper
Field Supervisor
Ecological Services

cc: NMFS - Pacific Area Office
Recovery, PIO
Listing, PIO
Wetlands, PIO

RECEIVED
AUG 16 1994

STANLEY YIM & ASSOC., INC.
Time _____



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213
TEL (310) 980-4000; FAX (310) 980-4018

August 26, 1994 F/SWO33:ETN

Ms. Lynette Marutani
Stanley Yim and Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

Dear Ms. Marutani:

Thank you for your letter regarding the proposed installation of a water main by the Board of Water Supply along Dillingham Boulevard. Although the U.S. Fish and Wildlife Service identified threatened green turtles (*Chelonia mydas*) as species that may be found in the project area, based on our knowledge of the distribution and behavior of green turtles around Oahu we find it highly unlikely that this species would be found in the upper reaches of the Kapalama Canal. Further, as the proposed water main is to be routed under the Kapalama Canal there should be no effect on any listed species or critical habitat under the jurisdiction of the National Marine Fisheries Service.

Should you have any further questions I can be reached at (808) 973-2937 or FAX (808) 973-2941.

Sincerely,

Eugene T. Nitta
Protected Species Program
Coordinator

cc: FWS - M. Stahl

RECEIVED
AUG 31 1994

STANLEY YIM & ASSOC., INC.
Time _____



APPENDIX C

**STATE OF HAWAII
DEPT. OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION**

HISTORIC SITES

JOHN WAIKEE
GOVERNOR OF HAWAII



STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 8TH FLOOR
HONOLULU, HAWAII 96813

May 12, 1994

Jason Yim
Stanley Yim & Associates, Inc.
2850 Paa Street, Suite 200
Honolulu, Hawaii 96819

KEITH AHLE, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

JOHN P. KEPPELER II
DONAL L. HAKALE

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

LOG NO: 11432 ✓
DOC NO: 9405TD06

Dear Mr. Yim:

**SUBJECT: Dillingham Boulevard 42" Water Main from Kalihi Street to
Vineyard Boulevard
Kapalama and Honolulu, Kona, O'ahu
TMK: 1-5, 1-7**

Thank you for the opportunity to review this project, which proposes to install a water main along Dillingham Boulevard. A review of our records shows that there are no known historic sites along the route of the proposed water main. Loko Kuwili, a fishpond buried many years ago, is located adjacent to Dillingham Boulevard at the Diamond Head end of the water main route. The street right of way is outside of the fishpond, however, and we believe that construction of the water main will have "no effect" on historic sites.

It is possible that historic sites, including human burials, will be uncovered during routine construction activities. Should this be the case all work in the vicinity must stop and the Historic Preservation Division must be contacted at 587-0047.

If you have any questions please call Tom Dye at 587-0014.

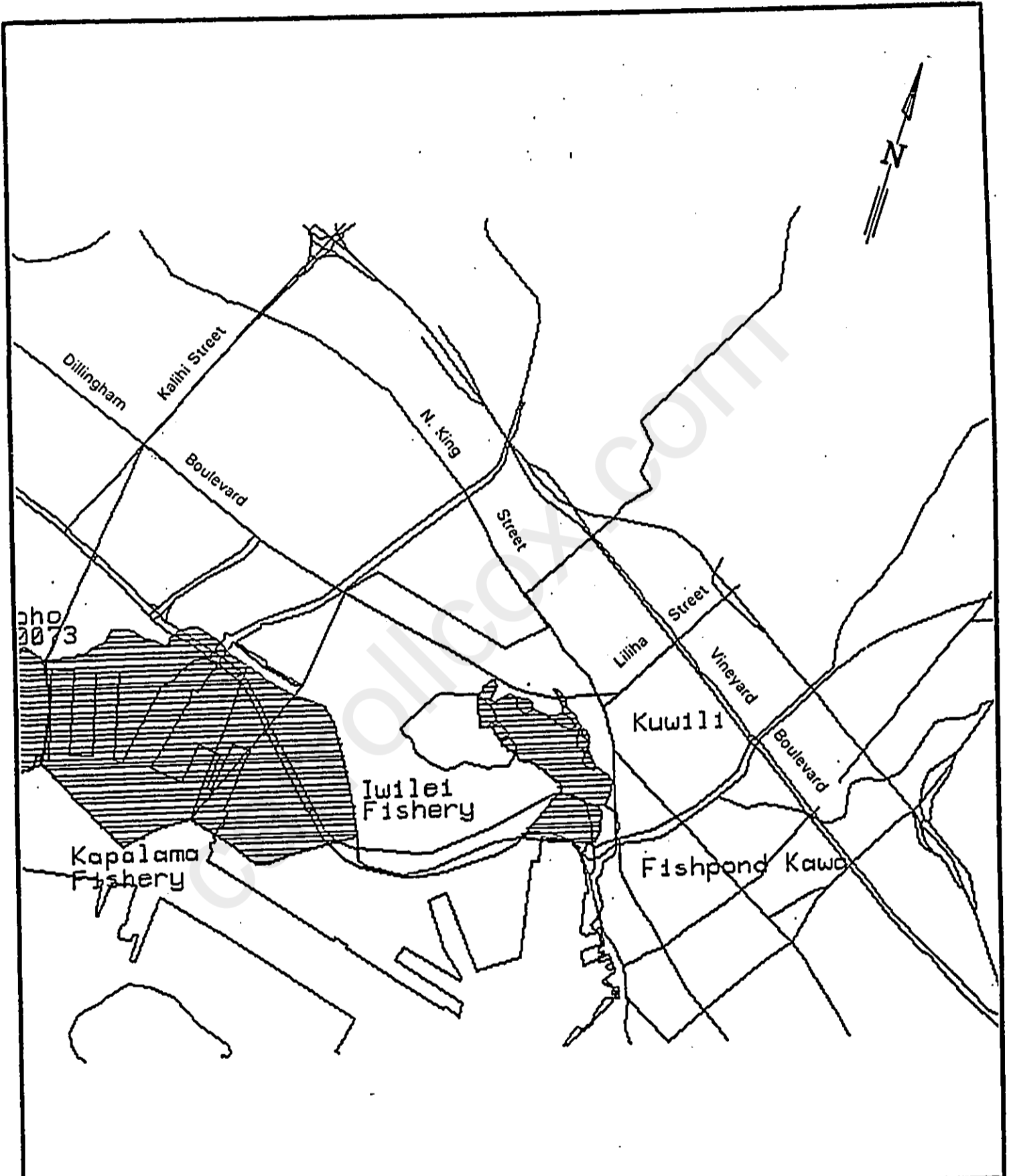
Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

TD:jt

RECEIVED
MAY 17 1994

STANLEY YIM & ASSOC., INC.
Time _____



DILLINGHAM BOULEVARD 42-INCH WATER MAIN
 FROM KALIHĪ STREET TO VINEYARD BOULEVARD
 Board of Water Supply
 City and County of Honolulu

Figure C-1
 STATE HISTORIC PRESERVATION DIVISION
 FISHPOND MAP