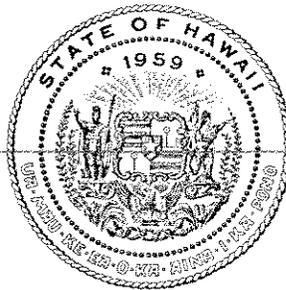


OEQOC BULLETIN



George R. Ariyoshi
Governor

Letitia N. Uyehara
Director

Office of Environmental Quality Control
550 Halekiau St., Rm. 301, Honolulu, Hawaii Ph. (808) 548-6915

Volume 1 August 8, 1984 No. 13

REGISTER OF CHAPTER 343, HRS DOCUMENTS

EIS PREPARATION NOTICE

The following proposed action has been determined to require an environmental impact statement. Anyone can be consulted in the preparation of the EIS by writing to the listed contact. 30 days are allowed for requests to be a consulted party.

697 ALA MOANA BOULEVARD PROJECT,
HIKIKI, OAHU, Jack E. Myers/City and
County of Honolulu Dept. of Land
Utilization

Previously published July 23, 1984.

Contact: Mr. F. J. Rodriguez
Environmental Communications,
Inc.
P.O. Box 536
Honolulu, Hawaii 96809

Deadline: August 22, 1984.

NEGATIVE DECLARATIONS

The following are Negative Declarations or determinations made by proposing or approving agencies that certain proposed actions will not have significant effects on the environment and therefore do not require EIS's (EIS Reg. 1:4p). Publication in the Bulletin of a Negative Declaration initiates a 60-day period during which litigation measures may be instituted. Copies are available at 25

cents per page upon request to the Office. Written comments should be submitted to the agency responsible for the determination (indicated in project title). The Office would appreciate a copy of your comments.

KAUAI

CONSERVATION DISTRICT USE APPLICATION FOR
LOADING AND UNLOADING OF CHARTER
PASSENGERS ON A STATE-OWNED BEACH,
HANALEI BAY, KAUAI, Blue Water Sailing
Company/Dept. of Land and Natural
Resources

The applicant proposes to shuttle charter passengers from a State-owned beach adjoining Hanalei Pier (offshore of TMK: 5-5-01:8) to their sailing vessel located offshore. The operation will consist of approx. 1 to 3 daily trips of 6 passengers each for excursions off Hanalei Bay. The applicant will shuttle passengers in a 15 ft. 9 in. Boston Whaler to a 33 ft. Pearson Vanguard which will be anchored 150 yds. off Hanalei Pier. There will be no shore landings other than to shuttle passengers to the applicant's vessel.

OAHU

PROPOSED CONSTRUCTION OF THE KAILUA ROAD
INTERCEPTOR SEWER, MAUNAWILI WASTEWATER
PUMPING STATION AND FORCE MAIN AND
KUKANONO WASTEWATER PUMPING STATION AND
FORCE MAIN, KAILUA, OAHU, City and County
of Honolulu Dept. of Public Works

The proposed action consists of the construction of the Kailua Road Interceptor Sewer, the Kukanono Wastewater Pump Station (WWPS) and Force Main, and the Maunawili WWPS and Force Main in Maunawili Valley, Kailua. The project is aligned along portions of Kalaniana'ole Hwy., Kailua Rd., and Manu Oo St. and is adjacent to the upper portion of Kawainui Marsh. The proposed project will eliminate wastewater effluent discharge into Kawainui Marsh from the Maunawili Park, Kukanono, and Pohakupu Sewage Treatment Plants (STP). In order to comply with State effluent requirements, raw sewage will be diverted from the existing treatment plants into the interceptor sewer (flows from the Pohakupu Sewer System will be intercepted and diverted to the interceptor sewer by gravity), then pumped from the Kailua Road Wastewater Pump Station (SPS) to the Kailua STP, located on Mokapu Peninsula, for treatment. The treated effluent would then be discharged into the ocean off Mokapu Pt., along with the treated effluent from other areas. The proposed improvements may be described as follows:

1. Kailua Road Interceptor Sewer (TMK: 4-2-3, 16, 31, 32, 33, and 51) will be a gravity sewer ranging between 12 and 13 in. in size, which will be constructed between the existing Kailua Rd. SPS and a point on Kailua Rd. approx. 800 ft. on the Kailua Town side (makai) of the Kailua Rd.-Kalaniana'ole Hwy. junction. All but +230 ft. of its total length of approx. 5,100 lineal ft. will be constructed within the Kailua Rd. right-of-way. The initial 230 ft. section will be constructed within the access road between the pump station site and Kailua Rd. The interceptor sewer will be designed for peak flows varying between 1.66

mgd to 4.80 mgd. Three main pipe connections to the interceptor sewer are proposed. At its highest terminus point, the 12-in. force main of the proposed Maunawili WWPS will discharge into the interceptor, a 10-in. force main connection from the proposed Kukanono WWPS will be made on Kailua Rd. approx. midway between the Ulumanu St. and Uluoa St. intersections, and the third connection is the existing 12-in. gravity sewer which currently crosses Kailua Rd. approx. 1,100 ft. on the Kailua Town side of the Ulumanu St. intersection with Kailua Rd. After the Interceptor Sewer is operational, the sewage currently going to the Pohakupu STP will be diverted at a new sewer manhole on Kailua Rd. into the Interceptor Sewer alignment. The interceptor sewer will be constructed on the right shoulder of the lane leading into Kailua town which will require that the traffic lane adjacent to the shoulder, in the vicinity of construction, be closed during periods of construction.

2. Maunawili Wastewater Pump Station and Force Main (TMK: 4-2-7:31, 4-2-13) will be constructed on the existing Maunawili Park Sewage Treatment Plant property. The plant is located on the mauka side of the property near the Auloa Rd. and Kalaniana'ole intersection. The pump station will be a reinforced concrete substructure consisting of a dry compartment which houses the sewage pumps and a wet wall compartment that receives the sewage to be pumped. It will also house the motor control center, the motors (if the pumps selected are an open vertical shaft type), toilet facilities, and a standby generator. Two identical pumping units to pump the estimated peak sewage flow of 1.66 mgd. will be provided with one unit serving as a standby. The 12-in., 3,800 ft. long force main will be routed directly to Kalaniana'ole Hwy. from the pump station and connected to the proposed

Kailua Rd. Interceptor Sewer. The force main will be hung along the existing bridge structure at Maunawili Stream. The line will be laid in the shoulder area of the Kailua-bound lanes and will terminate on Kailua Rd. with a discharge manhole. After the pump station and force main are activated, the Maunawili Park STP will be abandoned and the reduced area for the pump station facilities will be landscaped and fenced.

3. Kukanono Wastewater Pump Station and Force Main (TMK: 4-2-13: por. 3, 4-2-51) will be constructed adjacent to and at the southeast corner of the existing Kukanono STP. The station will include a superstructure and a reinforced concrete substructure consisting of a dry compartment and a wet well compartment. The superstructure will also house the motor control center, toilet facilities, and a standby generator. Two identical pumping units will be provided to pump the estimated peak sewage flow of 1.08 mgd with one serving as a standby unit. The 10-in., 1,100 ft. long force main for the Kukanono WWPS will be routed from the pump station (running parallel to an existing 8-in. gravity sewer) to the existing access road to Manu Oo St. It will then run along Manu Oo St. to its discharge manhole on the proposed Kailua Rd. Interceptor on Kailua Rd. After the pump station and force main are activated, the redundant facilities of the Kukanono STP will be abandoned and the area will be returned to the landowner. The area for the new pump station facilities will be landscaped and fenced.

The Kailua Rd. Interceptor Sewer will begin construction by mid-1984 and end by late 1986. The Kukanono WWPS and FM and the Maunawili WWPS and FM projects should start construction in early 1986 and be completed by early 1988.

WAIANAE REFUSE CONVENIENCE CENTER (WRCC),
WAIANAE, OAHU, City and County of
Honolulu Dept. of Public Works, Division
of Refuse Collection and Disposal

The agency is proposing the construction of an intermediate disposal facility which will accept household trash from area residents and which is intended to alleviate the chronic litter problem in the Waianae area. The proposed WRCC will be situated upon approx. 10,000 sq. ft. of land at the 30-acre Waianae Sanitary Landfill (WSLF) site. The post-closure plan for the WSLF has been coordinated with development plans for the WRCC. The convenience center will consist of a drive-through and U-turn disposal system. Access to the convenience center will be provided by a 20-ft. wide asphalt concrete roadway with a 10-ft. wide horseshoe U-turn at the disposal site. Refuse will be deposited into portable bins for hauling and disposal at a landfill or resource recovery facility. The convenience center will initially have two 7-ft. by 22-ft. bins, each with a capacity of 40 cubic yds. Filled bins will be transported and replaced with empty ones on a regular basis. The center has been designed to accommodate future expansion, which could double this capacity. It will be constructed upon compacted landfill material and may require periodic maintenance to compensate for differential settlement. Other site improvements will include low maintenance landscaping, chainlink fencing along the perimeter of the site and area lighting for security and safety. The proposed WRCC will be open on a 24-hr. basis to help minimize the unsightly, unsanitary and illegal dumping outside of the site. A private contractor will be hired by the City to transport the refuse bins to a disposal site on a regular schedule. The center will be designed to accommodate only disposal of refuse by homeowners. Municipal and commercial collection trucks will not be allowed to use the center and will be directed elsewhere for disposal.

CONSERVATION DISTRICT USE APPLICATION FOR MAINTENANCE DREDGING, MAKANI KAI MARINA, KANEHOHE, OAHU, Makani Kai Marina Association of Apartment Owners/Dept. of Land and Natural Resources

The proposed maintenance dredging is necessary for the continued operation of Makani Kai Marina as a small private boat harbor. The marina provides berthing for approx. 80 boats in a 3-acre area (TMK: 4-5-3:9) in Kaneohe. Alluvial sediment from Kealahala Stream and an existing storm outlet have made portions of the marina unusable at low tide and dredging would be needed to maintain adequate navigation depths in the marina and entrance channel. The dredging would be done by clamshell bucket and/or dragline. Dredged material would be deposited in an enclosed settling and desilting pond, with the dredge water flowing back into the marina through a screen which would retain the sediment. The dredged material would be allowed to dry, and then trucked to an approved landfill site. An estimated 5,000 cubic yds. of alluvial sediment will be dredged over a 10-yr. period.

MAUI

PROPOSED SUBDIVISION AND ISSUANCE OF A LAND LICENSE COVERING PORTION OF THE GOVERNMENT LAND AT KAWAIPAPA AND WAKIU, HANA, MAUI, Dept. of Land and Natural Resources

The proposing agency plans to subdivide a 421-acre parcel into two lots comprising of approx. 14 acres and 407 acres, respectfully. Upon subdivision of this parcel, the State proposes to sell a 10-yr. lease (land license) to Hana Equipment Co., Ltd. for the removal of landfill materials from the 14-acre portion (TMK: 1-3-06:por. 7). The remaining 407 acres will be kept in pasture use and its existing land use will not be changed. The subject site is located along Waikalua Rd., approx. 0.25 miles northwest of the existing Hana Dump

and approx. 3 mi. west of Hana. Under the land license granted by the State, Hana Equipment Co. proposes to dig, screen and periodically remove landfill materials from the site for use in various construction activities in the Hana area. Material preparation will be limited to screening, and a rock crusher is not anticipated to be necessary at this time.

HAWAII

PROPOSED IMPROVEMENTS AND RECONSTRUCTION WITHIN THE 40-FT. SETBACK AREA, NORTH KONA, HAWAII, Banyan Tree Homeowners Association/Hawaii County Planning Commission

The applicant seeks to legitimize already constructed improvements located within the minimum 40-ft. shoreline setback area of Hawaii County. The subject property (TMK: 7-6-14:14) is the site of the Banyan Tree Condominium and consists of 25,360 sq. ft. The four-story, 20-unit structure with a pool and deck is located on the makai side of Alii Dr., approx. 1,500 ft. south of the Alii Kai Subdivision in North Kona. The constructed improvements include: the reconstruction of the pre-existing rock wall destroyed by high surf in 1980 (utilizing cement as reinforcement); the widening of the concrete pad around the swimming pool by 6 ft.; and the 16 ft. extension of the makai rock wall which runs along the south boundary of the public access area at the north end of the property.

SUBDIVISION OF A 46.77-ACRE PARCEL WITHIN THE KAHALUU HISTORIC DISTRICT, KAHALUU, KEAUHOU 1ST, NORTH KONA, HAWAII, Ho'omahahele, Ltd./Hawaii County Planning Commission through the Planning Dept.

The applicant is requesting a Special Management Area permit to allow the subdivision of 46.77 acres of land (TMK: 7-8-10:35) into the following 5-lot subdivisions:

- Lot 1: 8.4 acres
- Lot 2: 21 acres
- Lot 3: 7 acres
- Lot 4: 5.2 acres
- Lot 5: 5.2 acres

burying a 10,000 gal. fuel tank, the fuel and utilities lines, pump island, and the building foundation. The site is presently paved with asphalt and concrete with 6-ft. high chain-link fencing around the perimeter of the entire site. The objective of the proposal is to provide maintenance facilities for rental cars.

The objective of the proposed 5-lot subdivision is to separate those portions of the property which have been rezoned from Open to Multiple Family Residential and Resort for future development and to isolate the historical preserves. The subject property is located on the mauka side of Alii Dr. at Kahaluu, North Kona. It is situated approx. 45 ft. from the shoreline across from the Keauhou Beach Hotel and the Kona Lagoon Hotel. The subdivision will create 3 lots makai of the Great Wall of Kuakini, which runs laterally through the site, and 2 lots mauka of the Great Wall. The 2 mauka lots will each be designated for multiple residential development and historic preserve. The 3 makai lots will include one zoned for resort development and two for open use. The zoning of these lots for Resort and Open will allow the applicant to continue to operate the existing Kona Gardens, a botanical and culture park, as proposed lots 3 and 4. The proposed subdivision improvements will include providing water service laterals to each proposed lot and fire hydrants along Alii Dr. and Alii Hwy. Realignment. In addition, a standard roadway connecting Lot 1 to the nearby Makolea St. is proposed to be located entirely within the future Alii Hwy. Realignment right-of-way.

ALAMO RENT A CAR RENTAL OFFICE, KEAHOLE AIRPORT, NORTH KONA, HAWAII, Alamo Rent A Car/State Dept. of Transportation, Airports Division

The applicant is proposing construction of a 100 sq. ft. service building including an underground fuel tank, a wash rack and drain on its own property at Keahole Airport in North Kona. The subject property is identified as TMK: 3-43: por. 32, Lot 002-106. The subject will require excavation for

ENVIRONMENTAL IMPACT STATEMENTS

EIS's listed in this section are available for review at the following public depositories: Office of Environmental Quality Control; Legislative Reference Bureau; Municipal Reference and Records Center (Oahu EIS's); Hamilton Library; State Main Library and the Kaimuki, Kaneohe, Pearl City, Hilo, Kahului and Lihue Regional Libraries. Statements are also available at State Branch Libraries that are in proximity to the site of a proposed action (indicated by project description).

Comments on the following EIS's may be sent to: 1) the accepting authority; and 2) the proposing agency. Please note the deadline date for submitting written comments on the EIS.

ENVIRONMENTAL IMPACT STATEMENT ADDENDUM FOR THE WAIIEHU PLANNED DEVELOPMENT, WAIIEHU, MAUI, Hawaii Housing Authority

Previously published July 23, 1984.

This EIS Addendum is available for review at the Kahului and Maui Community College Libraries.

Deadline: August 22, 1984.

EIS'S SUBMITTED FOR ACCEPTANCE. The following EIS's have been submitted for acceptance and contain comments and responses made during the review and response period.

REVISED ENVIRONMENTAL IMPACT STATEMENT
FOR THE KALUANUI WELLS, KOOLAULOA, OAHU,
City and County of Honolulu Board of
Water Supply

The Board of Water Supply (BWS) has drilled and tested one exploratory well on the northwest side of Kaluanui Valley at an elevation of 134 ft. A second BWS exploratory well is proposed at a similar elevation about 600 ft. north of the existing well. However, if test pumping of the second exploratory well is not successful, then another exploratory well will be developed at a similar elevation about 600 ft. south of the existing well. The existing and proposed wells are sited within Sacred Falls State Park on a portion of a State owned parcel identified as TMK: 5-3-09:2. In order to develop water from its Kaluanui Wells, the BWS is proposing to construct a water transmission main and electrical and telephone lines between the wells and Kamehameha Hwy. The pipeline and utility lines will be almost entirely within Sacred Falls State Park on portions of State owned parcels identified as TMK: 5-3-09:2 and 5-3-10:1. A short section of proposed pipeline and utility lines will be located on a portion of a parcel owned by Zions Securities Corporation and identified by TMK: 5-3-12:41. Approx. 1.5 mgd will be pumped from each of the Kaluanui Wells. The total 3.0 mgd will be used to service Windward Oahu from Punaluu through Waimanalo. Any surplus water will be exported to the Honolulu Water District.

This EIS is available for review at the Kahuku Community-School Library.

Status: Currently being processed by the Office of Environmental Quality Control.

REVISED ENVIRONMENTAL IMPACT STATEMENT
FOR THE WAILUA-HANA WATER SYSTEM
IMPROVEMENTS, HANA, MAUI, County of Maui
Dept. of Water Supply

The project objective is to treat the existing surface water sources or to find new sources for the Wailua-Hana Water System in order to comply with the State and Federal drinking water quality standards. Surface water from Wailua Stream must be treated to reduce turbidity, iron content, odor, color, and corrosivity if it is to be used as a source for the Hana Water System. The Waiuku wells have problems with corrosivity and chloride levels. The proposed improvements include the following:

Site I: The construction of a slow sand filter system on a portion of TMK: 1-5-8:5, located above the 5,000 gal. redwood storage tank at Koali. Site development will include the construction of an access road, clearing and grading. In addition, a 50,000 gal. storage tank will be constructed in the Koali area.

Site II: The drilling of a new groundwater well near the 20,000 gal. storage tank at Hamoa, a 150,000 gal. storage reservoir, pumps and piping which will be located on a portion of TMK: 1-4-9:2, which is owned by Hana Ranch, Inc.

Site III: A new interconnecting pipeline alignment that will generally follow an existing water pipeline through pasture land (TMK: 1-4-02:4,7,8,10, 1-4-03:9,5,6, 1-4-07:3,4, and 1-4-09:2) between the proposed new Hamoa reservoir and the existing water tanks above Hana Town. The proposed actions have been planned for phased construction over a period of three years.

This EIS is available for inspection at the Kahului, Lahaina, Makawao and Maui Community College Libraries.

Status: Currently being processed by the Office of the Mayor, County of Maui, and the Office of Environmental Quality Control.

FINAL ENVIRONMENTAL IMPACT STATEMENT FOR PROPOSED STATE LAND USE BOUNDARY ENDMENT, KAHALUU, KOOLAUPOKO, OAHU, A.R. and Raymond H. Nylen/State Land Use Commission

Status: Currently being processed by the State Land Use Commission.

Previously published July 23, 1984.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE MAKAHA WELLS, MAKAHA, OAHU, Board of Water Supply, City and County of Honolulu

Previously published July 8, 1984.

This EIS is available for review at the Waianae Library.

Status: Accepted by Mayor Anderson on July 20, 1984.

Status: Currently being processed by the State Land Use Commission.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE KAUPU WATER SYSTEM IMPROVEMENTS, KAUPU, MAUI, County of Maui Dept. of Water Supply

Previously published July 23, 1984.

This EIS is available for inspection at the Kahului, Lahaina, Makawao, and Maui Community College Libraries.

Status: Currently being processed by the Office of the Mayor, County of Maui and the Office of Environmental Quality Control.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED LEEWARD DISTRICT SANITARY LANDFILL AT WAIMANALO GULCH SITE AND OHIKILOLO SITE, OAHU, City and County of Honolulu Dept. of Public Works

Previously published May 23, 1984.

This EIS is also available for inspection at the Waianae Library.

Status: Not accepted by the City and County of Honolulu Dept. of Land Utilization on July 13, 1984.

REVISED EIS FOR THE MAUNAWILI DITCH IMPROVEMENTS, MAUNAWILI VALLEY, KOOLAUPOKO, OAHU, Dept. of Land and Natural Resources, Division of Water and Land Development

Previously published July 8, 1984.

This EIS is also available for inspection at the Kailua library.

Status: Currently being processed by the Office of Environmental Quality Control.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE CONSERVATION DISTRICT USE APPLICATION FOR THE PROPOSED LANIKAI HALE, LANIKAI, OAHU, Mr. and Mrs. Ralph Englestad/Dept. of Land and Natural Resources

Previously published July 8, 1984.

This EIS is available for review at the Kailua Library.

Status: Not accepted by the State Department of Land and Natural Resources on August 3, 1984.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE FARMS OF KAPUA, SOUTH KONA, HAWAII, Farms of Kapua/State Land Use Commission

Previously published April 8, 1984.

This EIS is available for review at the Maalaea and UH-Hilo Campus Libraries.

NOTICE

PROPOSED AMENDMENT TO THE DIVISION OF
WATER AND LAND DEVELOPMENT EXEMPTION LIST

The review of the proposed amendment has been deferred to the next Environmental Council meeting.

OEOC BULLETIN

OFFICE OF ENVIRONMENTAL QUALITY CONTROL



GEORGE R. ARIYOSHI
GOVERNOR

LETITIA N. UYEHARA
DIRECTOR

Volume I

August 23, 1984

No. 14

REGISTER OF CHAPTER 343, HRS DOCUMENTS

EIS PREPARATION NOTICES

The following proposed actions have been determined to require an environmental impact statement. Anyone can be consulted in the preparation of the EIS by writing to the listed contacts. 30 days are allowed for requests to be a consulted party.

WINDWARD OAHU REGIONAL WATER SYSTEM
IMPROVEMENTS, MALAEKAHANA THROUGH MAKAPUU,
OAHU, City and County of Honolulu Board of
Water Supply

The Board of Water Supply (BWS) has decided to prepare a single Environmental Impact Statement for all of its currently proposed Windward Oahu water development projects, reservoirs, and transmission mains in the region extending from Malaekahana through Makapuu. Previously, the BWS has filed negative declarations or EISs as individual projects were programmed. The proposed regional water system improvements may be described as follows:

1. New water sources:

The proposed new BWS water sources will either develop dike-confined ground water, basal ground water or alluvial ground water with tunnels, inclined wells, conventional wells and one shaft. Proposed tunnels and inclined wells will be free-flowing and will not be pumped. Development will involve exploratory and production phases. The exploratory phase will involve drilling, grading for access road (if necessary), pump testing and well

casing until the well can be put in production. On-site production facilities for a new BWS well field will include pumps, pump mutes (if required), electrical equipment and appurtenances, one-story control building (including a standby chlorinator facility), piping, landscaping, irrigation system and fencing. These facilities (including 1 operating and 1 standby well) will typically be confined within a 10,000 sq. ft. site. Off-site facilities will include a water transmission main, all-weather access road for pipeline and control building maintenance, and an electrical and telephone line to the control building. Currently, the location of these off-site facilities is mostly unresolved. Underground utility lines will be used when required in public parks. Not all of the planned well sites will yield enough water to justify development of production facilities, therefore, in several cases, alternative well sites are proposed. Some of the proposed Windward BWS water sources have already been developed but have yet to be put into production, others have been budgeted in the BWS Six-Year Capital Improvement Program (CIP) and others are only conceptual.

2. New reservoirs in the BWS Six-Year CIP:

Six reservoirs are proposed before the end of the decade of which two, the Hauula "180" and Heeia Kai "272" Reservoirs, do not yet have a firm site. Two others, the Ahuimanu "500"

and Luluku "500" Reservoirs (for the Ahuimanu Phases II to VI and the Bethany Gardens subdivisions), are proposed private reservoirs which would be oversized at BWS expense. Construction plans and siting for these reservoirs are still preliminary and have yet to be approved by the BWS. New reservoirs are usually placed on a fenced, landscaped terrace cut into a hillside. On steep slopes, installation usually requires a series of terraces for slope stabilization. Off-site infrastructure associated with a new reservoir will include water transmission mains, an all-weather access road for pipeline and reservoir maintenance, and electrical and telephone lines to reservoir monitors. Additional reservoirs will be required to stabilize pressure and minimize pump control problems from proposed BWS windward water development projects. The number and capacity of these reservoirs will depend on availability of suitable reservoir sites and BWS evaluation of the cost-effectiveness of different means for improving system reliability.

3. New transmission mains in the BWS Six-Year CIP:

The proposed transmission mains (ranging in diameter from 12 to 42 in.) will basically run along Kamehameha Hwy. from Laie, Kahekili Hwy. and on portions of the Likelike and Kalaniana'ole Hwys. Currently it remains unresolved as to whether additional mains will be required to accommodate water from the proposed windward water development projects.

The list of locations and details of the proposed BWS water development projects, reservoirs and transmission mains in Windward Oahu are summarized in Tables 4, 6, and 7 which are attached to the end of this Bulletin.

Contact: Mr. Lawrence Whang
Board of Water Supply
City and County of Honolulu
630 S. Beretania Street
Honolulu, Hawaii 96843

Written requests to be a consulted party should be sent to the above address with a copy to:

VTN Pacific
Attn: Mr. Doug Meller
1164 Bishop Street, Suite 906
Honolulu, Hawaii 96813

Deadline: September 22, 1984.

CONSERVATION DISTRICT USE APPLICATION FOR THE PROPOSED KAPAA QUARRY PHASE II PROJECT, KAPAA VALLEY, KOOLAUPOKO, OAHU, Ameron HC&D/Dept. of Land and Natural Resources

The proposed project involves the quarrying and preparation of suitable rock for use in the concrete industry and base material for use in the construction industry. The proposed project site will be located in Kapaa Valley and is identified as TMK: 4-2-15:1. The 394,271-acre parcel is divided by a completed portion of the H-3. The upper or present quarry site (Phase I) is approx. 227 acres, the lower or proposed project site (Phase II) is approx. 152 acres and the remaining +15 acres adjoins another parcel and is currently used as a wire mesh fabricating plant. The Phase II project site will be quarried similar to the existing Phase I quarry. All quarrying of the Phase II site will be confined within the leased boundaries (152 acres) and quarrying will not occur on the Ulumawao ridge line. Exploration drilling will be carried out to assess the location and estimated quantity of quarry material. Temporary access roads will be constructed and drilling sites, each 50 ft. by 50 ft., will be cleared. The topsoil will be removed to expose the quarry rock and stored for future use or used to cover previously excavated areas. Rock will be removed by controlled blasting or with power shovels. Blasting will be carried out by drilling a series of holes 6.5 in. in diameter by approx. 55 ft. deep and spaced on a 16 by 18 ft. pattern. Rock faces will be benched at vertical intervals not exceeding 50 ft. Upon termination of the project, each bench and the quarry floor will be covered with no less than 2

ft. of topsoil and planted with suitable vegetation. The existing quarry processing plant in the Phase I section will remain to handle the Phase II quarry materials. It is proposed that at a suitable time, a rock crusher will be constructed in the Phase II section which will reduce the size of large rock and boulders for transport to the processing plant by a conveyor belt system. The underpass across H-3 Hwy. will be used for vehicles between Phase I and Phase II as well as for the conveyor belt system. Dump trucks will be operated within the Phase II area to transport rock to the new Phase II crusher plant.

Contact: Mr. George West
 Manager, Kapaa Quarry
 Ameron HC&D
 P.O. Box 29968
 Honolulu, Hawaii 96820

Deadline: September 22, 1984.

NEGATIVE DECLARATIONS

The following are Negative Declarations or terminations made by proposing or approving agencies that certain proposed actions will not have significant effects on the environment and therefore do not require EIS's (EIS Reg. 1:4p). Publication in the Bulletin of a Negative Declaration initiates a 60-day period during which litigation measures may be instituted. Copies are available at 25 cents per page upon request to the Office. Written comments should be submitted to the agency responsible for the determination (indicated in project title). The Office would appreciate a copy of your comments.

KAUAI

REPAIR AND CONSTRUCTION OF IRRIGATION SYSTEM COMPONENTS, EAST WAIOLI IRRIGATION SYSTEM, HANAIEI, KAUAI, Dept. of Land and Natural Resources, Division of Water and Land Development

The objective of the proposed project is to extend the continued functioning of the East Waioli Irrigation System through repair of existing components and construction of new facilities for the East Waioli Ditch (EWD). The project site is in the Hanalei district, in the ahupuaa of Waioli, on the north shore of Kauai. It is within State-owned parcels identified as TMK: 5-6-02:01 and 5-5-08:18. Beginning about 0.6 mi. inland from Hanalei Bay, the proposed work extends another 0.5 mi. into Waioli Stream Valley. The lower intake on the East Waioli Ditch is proposed for renovation. It is within the EWD itself and splits the flow eastward back towards Waioli Stream and northward to the flume. The upper intake is the true diversion on Waioli Stream and is not being renovated. The reconstruction of the lower intake will require approx. 30 cubic yds. of rock which is available in the immediate vicinity of the proposed structure. Supply is such that removal of boulders from the ditch bed may help to restore the original conveyance capacity of the watercourse without adversely affecting ditch erosion. After repair of the existing ditch breaks, less water will be lost from the East Waioli Ditch, hence more ditch flow may be sent back to Waioli Stream from the renovated lower intake. The flume and trestle will be replaced since the imminent failure of a corrugated metal flume and wooden trestle at the boundary of the hau forest and taro fields threaten the future of some of the most productive plots in the State. Some hau will be removed to provide working room for replacement of the flume and some ginger may be trampled and weeded out to clear the East Waioli Ditch. Any minor clearing to be done will be in an exotic, disturbed forest. Permanent structures will be installed to serve both as pebble traps and overflow controls since upstream of the flume, the earth ditch has been breached in several locations. It continues to function with banks shored by planks and other temporary supports. The construction of flow control and pebble trap devices where ditch banks have been breached, may require 3 to 4 cubic yds. of rock at each site. Five to six sites scattered along 3,000 ft. of ditch may

require a total of about 20 cubic yds. The ~~work for this grouted rubble paving will~~ most likely be taken from the plentiful supply of boulders in Waioli Stream.

will be totally demolished and ~~reconstructed to a similar configuration.~~ The structure's facade will be renovated by replacing windows, awnings, and the storefront. The new 1,500 sq. ft. 4th floor and 600 sq. ft. stairwell on top of the original structure will be used for storage.

OAHU

CORRECTIONS TO THE AUGUST 8, 1984 BULLETIN:

PROPOSED CONSTRUCTION OF THE KAILUA ROAD INTERCEPTOR SEWER, MAUNAWILI WASTEWATER PUMPING STATION AND FORCE MAIN AND KUKANONO WASTEWATER PUMPING STATION AND FORCE MAIN PROJECT, KAILUA, OAHU, City and County of Honolulu Dept. of Public Works

Under 1. Kailua Road Interceptor Sewer. 2nd line should have read:

will be a gravity sewer ranging between 12 and 18 in. in size, rather than 13 in. in size as previously published.

Under 2. Maunawili Wastewater Pump Station and Force Main. 8th line should have read:

The pump station will be a reinforced concrete substructure consisting of a dry compartment which houses the sewage pumps and a wet well compartment that receives the sewage to be pumped.

A CHINATOWN HISTORIC, CULTURAL, SCENIC DISTRICT CERTIFICATE OF APPROPRIATENESS TO RESTORE AND CONSTRUCT ADDITIONAL STRUCTURES ON AN EXISTING BUILDING, CHINATOWN, OAHU, Walter Tang/City and County of Honolulu Dept. of Land Utilization

The applicant proposes to renovate an existing 3-story structure, construct a 4th story and a stair bulkhead addition at 1041 Maunakea St. in Chinatown (TMK: 1-7-3:89). Currently, the 3-story structure is utilized as a commercial building, housing a martial arts supply business with a retail outlet, an office and a storage area. The building contains approx. 4,650 sq. ft. of commercial space. The proposed renovations will include both the interior and exterior of the building. The interior

PROPOSED DEMOLITION OF THE HONOLULU BREWERY BUILDING, KAKAAKO, OAHU, American Brewing Company, Ltd./Hawaii Community Development Authority

The applicant is requesting a Certificate of Appropriateness for the demolition of an existing industrial multi-story brewery building which is listed on the National Register of Historic Places. The project site (TMK: 2-1-31:21) is located at 549 South Queen St. and consists of 64,705 sq. ft. The structure is located on the Diamond Head portion of the parcel and most of the remaining area is currently used as a grade-level parking lot. The Brewery is considered to be substandard, in need of major repair and unsafe for habitation. The building is currently unoccupied and has been since 1961 when brewery operation ceased. The applicant has not indicated any immediate plans for further development of the parcel. The demolition would make it possible to increase the existing parking area and thereby generate additional income for the landowner.

BOOTH ROAD RECONSTRUCTED SEWER, HONOLULU, OAHU, City and County of Honolulu Dept. of Public Works

The project consists of the installation of approx. 3,200 lineal ft. of 8-in. sewer pipe within the existing rights-of-way. The proposed project site is located in Pauoa and is identified as TMK: 2-2-11, 18 and 19. The pipeline will begin at the intersection of Pauoa Rd. and Pacific Heights Rd. proceed onto Booth Rd to approx. 80 ft. beyond Kaola Way, and will also run on a segment of Kaola Way, and on a segment of Star Rd. from its intersection with Booth Rd. The objective of the

project is to replace defective and ~~obstandard~~ sewer lines constructed more than 65 years ago. The new sewer line will prevent future backups in the system. Due to narrow road widths, excavated material will not be stored on site. During work hours, construction activities and equipment may obstruct pedestrian and vehicular traffic in the immediate area of construction. During non-work hours, all mobile equipment will be removed from the area and all trenches will be covered and provided with suitable barricades.

REZONING OF A 1.2-ACRE VACANT PARCEL FROM R-6 RESIDENTIAL DISTRICT TO B-2 COMMUNITY BUSINESS DISTRICT, AIEA, OAHU, Aiea Plaza Inc./City and County of Honolulu Dept. of Land Utilization

The applicant is requesting the rezoning of a vacant 1.2-acre parcel of land from R-6 Residential to B-2 Community Business District in order to develop a 4-story retail and office building. The subject parcel is located on the ~~sewa~~ seaward side of Kauhale St., near the intersection of Moanalua Rd. and Kauhale St. in Aiea. It is identified as TMK: 9-9-40:55 and 62. The structure, as conceptually designed, will be 42 ft. high and consist of 4 stories containing approx. 31,962 sq. ft. of total floor area. Retail establishments will occupy the ground floor (5,078 sq. ft.) while the three upper floors (25,884 sq. ft.), built around an atrium, will contain offices. Eating and drinking establishments may be included but will not constitute the principle use of the building. The preliminary site plan provides for 89 stalls plus 2 loading spaces. All parking will be at ground level with the front portion of the lot reserved for shoppers and the rear portion designated for office tenants and their clients. The site fronts Kauhale St. which is currently paved but has no curb gutters or sidewalks. Roadway improvements will include curbs, gutters, sidewalks, and a 40-ft. wide paved roadway within a 56-ft. wide right-of-way. Utility requirements will be provided as the demand is generated and landscaping will be implemented throughout the project site.

AFTER-THE-FACT ZONING VARIANCE TO ALLOW HOTEL EXPANSION OVER THE ALLOWED FLOOR AREA, TO PERMIT AN EXISTING UTILITY/LOUNGE ROOM, WAIKIKI, OAHU, Kuhiolani Apartment Condominium/City and County of Honolulu Dept. of Land Utilization

The applicant is requesting an after-the-fact variance from the Comprehensive Zoning Code to allow a hotel in the Waikiki Special Design District to expand 470 ft. over the allowed floor area ratio by permitting an existing utility/lounge room. The subject parcel is located at 2415 Kuhio Ave. (makai side) in Waikiki and is identified as TMK: 2-6-23:67. The 470 sq. ft. utility/lounge room is located on the first level parking lot and contains a toilet, lounge and laundry room. It is utilized only by the management and employees of the hotel as a lunchroom and laundry room. Its dimensions are approx. 18 ft. by 24 ft. and has been in operation for about 16 yrs. on the hotel complex site.

HAWAII

PROPOSED BOUNDARY AMENDMENT TO RECLASSIFY APPROX. 1,407 ACRES OF LAND FROM AGRICULTURAL AND CONSERVATION DISTRICTS TO AN URBAN DISTRICT, WAIAKAHIULA, PUNA, HAWAII, County of Hawaii Planning Dept.

The County of Hawaii Planning Department is petitioning the State Land Use Commission for an amendment to the State Land Use Boundary of approx. 1,407 acres of land from the Agricultural and Conservation Districts to Urban District. The boundary amendment involves three subdivisions which were initially approved in 1960 and 1961 prior to the enactment of the State Land Use Law. The three subdivisions (Hawaiian Beaches, Shores and Parks) are located in the Puna District between the towns of Keaau and Pahoia and are identified by TM plats as 1-5-63 through 111, excluding 1-5-65:70-90. For the purposes of the petition, the subdivisions are being considered as one since they are adjacent to one another and share a common road

system. The purpose of the petition is to ~~knowledge the residential nature and use~~ these non-conforming subdivisions. Primary access from the highway (FAS Route 130) is through Kahakai Blvd. and interior accesses are provided by a system of private roadways, with the exception of the old Government Beach road which parallels the shoreline. There are 3931 lots of which 117 (consisting of approx. 28 acres), are within the Conservation District. In relation to the subdivision as a whole, these lots are located along the coast, between the old Government Beach Rd. and the shoreline. They range from 7,000+ to 11,000+ sq. ft. in size. Of the Conservation District lots, 49 are shoreline parcels. There are six single family dwellings, two of which are located on shoreline parcels. There are also two park sites, one is owned by the County of Hawaii and the other is owned by the developers of the subdivision. These account for 17 lots along the shoreline and total approx. 6 acres. No structures or facilities have been constructed on these park sites and they presently serve as access to the shoreline. There are no sand beaches along the coastline; rather the shoreline drops from medium to high lava cliffs into coastal waters. Both electrical and telephone systems and a private water system are available within the subdivisions, but there are no municipal sewerage nor solid waste disposal services within the subdivision. Sewage is by individual cesspools and individual waste must be privately hauled to the nearest transfer station, approx. 4 mi. outside of Pahoia.

ENVIRONMENTAL IMPACT STATEMENTS

EIS's listed in this section are available for review at the following public depositories: Office of Environmental Quality Control; Legislative Reference Bureau; Municipal Reference and Records Center (Oahu EIS's); Hamilton Library; State Main Library and the Kaimuki, Kaneohe, Pearl City, Hilo, Kahului and Maui Regional Libraries. Statements are also available at State Branch Libraries

that are in proximity to the site of a proposed action (indicated by project description).

Comments on the following EIS's may be sent to: 1) the accepting authority; and 2) the proposing agency. Please note the deadline date for submitting written comments on the EIS.

EIS'S SUBMITTED FOR ACCEPTANCE. The following EIS's have been submitted for acceptance and contain comments and responses made during the review and response period.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE KALUANUI WELLS, KOOLAULOA, OAHU, City and County of Honolulu Board of Water Supply

Previously published August 8, 1984.

This EIS is available for review at the Kahuku Community-School Library.

Status: Currently being processed by the Office of Environmental Quality Control.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE WAILUA-HANA WATER SYSTEM IMPROVEMENTS, HANA, MAUI, County of Maui Dept. of Water Supply

Previously published August 8, 1984.

This EIS is available for inspection at the Kahului, Lahaina, Makawao and Maui Community College Libraries.

Status: Currently being processed by the Office of the Mayor, County of Maui, and the Office of Environmental Quality Control.

FINAL ENVIRONMENTAL IMPACT STATEMENT FOR A PROPOSED STATE LAND USE BOUNDARY AMENDMENT, KAHALUU, KOOLAUPOKO, OAHU, A.R. and Raymond H. Nylen/State Land Use Commission

Previously published July 23, 1984.

PETITION FOR DECLARATORY RULING

Status: Currently being processed by the State Land Use Commission.

The petition for Declaratory Ruling on the Keanae Water System Improvements Project was reviewed and acted upon by the Environmental Council at its August 1, 1984 meeting.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE KAUPU WATER SYSTEM IMPROVEMENTS, KAUPU, MAUI, County of Maui Dept. of Water Supply

Previously published July 23, 1984.

Having considered the matter of the Keanae Water System Improvements Project, the Petition for Declaratory Ruling filed, and the testimony presented, the Environmental Council makes the following ruling:

This EIS is available for inspection at the Kahului, Lahaina, Makawao, and Maui Community College Libraries.

FINDINGS OF FACT

Status: Currently being processed by the Office of the Mayor, County of Maui and the Office of Environmental Quality Control.

1. The County of Maui has proposed to construct improvements to the Keanae Water System, which is inadequate and is in need of repair and improvement.

REVISED EIS FOR THE MAUNAWILI DITCH IMPROVEMENTS, MAUNAWILI VALLEY, KOOLAUPOKO, OAHU, Dept. of Land and Natural Resources, Division of Water and Land Development

Previously published July 8, 1984.

2. Cost of constructing the improvements is to be financed in part by State funds. All land acquisition costs, however, are to be borne by the County.

This EIS is also available for inspection at the Kailua library.

3. A draft environmental impact statement was prepared and notice of its availability for review and comment was published in the October 23, 1983 EQC Bulletin.

Status: Currently being processed by the Office of Environmental Quality Control.

4. The Office of Environmental Quality Control, designated by the Governor as the accepting authority, required the county to withdraw its draft EIS when it was subsequently learned that the site for the water storage tank had been changed to a new site which was not discussed in the draft EIS.

REVISED ENVIRONMENTAL IMPACT STATEMENT FOR THE FARMS OF KAPUA, SOUTH KONA, HAWAII, Farms of Kapua/State Land Use Commission

Previously published April 8, 1984.

5. Accordingly, in the June 23, 1984 issue of the OEQC Bulletin, notice was published that the draft EIS was withdrawn and a new draft EIS had been submitted and was available for review and comment.

This EIS is available for review at the Kealahou and UH-Hilo Campus Libraries.

6. As an EIS preparation notice had been previously filed on February 25, 1981, the Office of Environmental Quality Control did not require the County to publish a new EIS preparation notice. The Office of Environmental Quality Control waived the requirement for a new EIS preparation notice.

Status: Currently being processed by the State Land Use Commission.

7. The new draft EIS is in the comment and response phase, and has not been accepted.

NOTICE

8. The County proposes to acquire the water storage tank site through the initiation of eminent domain proceedings.

9. Maui's County Council approved a resolution on May 18, 1984 authorizing ~~condemnation proceedings.~~

10. Maui County has further:

- a. Requested, and on May 18, 1984, received from the Governor, authority to call for bids on the project and the awarding of the contract if the low bid was within the available appropriation and/or project estimate, as well as the giving of the notice to proceed, promising the release of funds. It was the understanding of the Governor that the County would take the initiative to acquire the necessary land for the subject project with its own funds.
- b. Obtained a SMA permit for the improvements on May 22, 1984.
- c. Put the project out for bids on May 25, 1984, which bids were opened on June 14, 1984.
- d. Requested, on June 19, 1984, that the State Comptroller encumber the funds and that the Governor release the funds.

11. To date, no funds have been released by the Governor, no property has been condemned, and no construction started.

12. Petitioners are eighteen residents and/or landowners in the Keanae-Wailuanui community, some of whom claim undivided interests in the property on which the County of Maui proposes to place the water storage tank.

13. Petitioners interest in bringing the petition for a declaratory ruling is to protect their environmental rights; to participate in the planning and review of projects which may have an impact on the environment; and to insure compliance with Chapter 343, HRS. Petitioners also are concerned that the proposed condemnation proceedings will affect claimed property interests and require costly efforts to establish and defend these claims.

CONCLUSION

1. The changes that have been made in the project plans justify the preparation of a new EIS which, upon the advice of the Office of Environmental Quality Control, has been submitted for review and comment.

2. In accordance with Section 343-5(b), HRS, acceptance of a required statement is a condition precedent to implementation of the proposed action.

RULING

The County of Maui is advised to halt all further activity implementing the Keanae Water System Improvements Project until the environmental impact statement for the project is accepted.

The Environmental Council expresses its alarm at the past activities taken by the County toward the implementation of the project prior to the acceptance of the environmental impact statement.

The following dissenting opinion was filed by Environmental Council member, Cynthia H. H. Thielen.

DISSENT

I dissent.

Due to significant changes in its original project, the County of Maui, Department of Water Supply ("DWS") was informed by the Office of Environmental Quality Control to withdraw its original environmental impact statement ("EIS") prior to its acceptance and to prepare a revised draft EIS. Absent an initial accepted EIS and in light of the major changes in the proposed project, the DWS is precluded from processing this revised draft EIS as a supplemental statement. Thus, DWS must proceed in accordance with Section 343-5, Hawaii Revised Statutes ("HRS") and Regulation 1:31(c)(1) of the EIS Regulations of the Environmental Council ("Regulations").

The changes in the proposed project have a significant effect on the environment as these terms are defined in Regulations 1:4 (k) and (s) as follows:

1. Emergency overflow from the tank disposing of chlorinated water would be directed into Waiokamilo Stream.
2. Rather than on State or county land, the DWS is proposing to locate the 50,000 gallon storage tank on private land which would require institution of eminent domain proceedings for hui land owned primarily by a substantial number of Hawaiians.

Significant effect means, inter alia, "the sum of those effects that affect the quality of the environment, including ... adverse effects upon the economic or social welfare." Regulation 1:4(s). Environment is defined in Regulation 1:4(k) as, "physical, economic and social conditions" which exist in the area to be affected including the community and water. See also, Regulations 1:31(a)(4) and (5) wherein factors which substantially affect economic or social activities or welfare of the community may constitute a significant effect upon the environment. It belies reason to declare that these proposed changes would not have a substantial or significant effect on the environment as these terms legally are defined. County condemnation proceedings, at the least, will require hui members to defend title to their land in legal proceedings, and the emergency overflow system can affect the stream and surrounding environment.

In addition, the majority misunderstands the difference between the "consulting" phase and the "commenting" phase, and declares that response to comments is sufficient in this case. First, Section 343-5(b), HRS, and Regulations 1:31(d) and 1:41(a) clearly require DWS to consult with individuals and groups in the early stages of the EIS preparation and prior to the review period and to the filing of the document. Consult as defined in Webster's Third New International Dictionary, Unabridged (1966 ED.) means "to ask advice of, seek the opinion of..." In clear contrast, comment is defined by Webster's as "to explain or interpret ..." Comments are part of the review period for a prepared document. See, Regulation 1:61. Consultation allows those affected by the proposed project to have "early and open discussion" with the DWS and "[p]ublic review will not substitute for [this] early [step]." Regulation 1:60. A criteria for acceptance of the EIS is that this consultation process shall have been completed satisfactorily. Regulation 1:71(a).

Finally, the County of Maui cumulatively has taken steps which constitute action prior to the acceptance of the EIS. Section 343-5(b), HRS, and Regulation 1:72(b) preclude the County of Maui and/or DWS from taking such action and from proceeding with implementation of this proposed project absent an accepted document which has been processed in accordance with the law.

TABLE 4

LOCATION OF PROPOSED BWS WATER DEVELOPMENT PROJECTS IN WINDWARD OAHU

REGION AND NAME OF WATER SOURCE	DESCRIPTION	TAX MAP KEY	PROPERTY OWNER	PARCEL SIZE (Acres)	STATE LAND USE DISTRICT	POTENTIAL YIELD	MAXIMUM
LAI							
Malaekahana Wells	up to 2 operating and 1 standby well	5-6-7:2	Campbell Estate	175.47	Agricultural	replaces other wells	
Lai Wells	1 operating and 1 standby well	5-5-7:1	Zions Securities Corp.	1,934.112	Agricultural	1.5 mgd	
Waialele Wells	1 operating and 1 standby well	5-5-6:1	Zions Securities Corp.	240.054	Agricultural	1.5 mgd	
HAUULA							
Kaipapau Wells	1 operating and 1 standby well	5-4-4:4	Plumbers Local 675	158.641	Conservation	1.5 mgd	
Kaipapau Wells (Alternate)	1 operating and 1 standby well	5-4-4:3	Thomas S. Aana et. al.	77.6	Conservation	alternate site	
Maakua Wells (BWS)	1 operating and 1 standby well	5-4-5:1	State DLNR	151.66	Conservation	1.5 mgd	
Maakua Wells (BWS Alternate)	1 operating and 1 standby well	5-4-5:3	Cullen's Ltd.	4.52	Conservation	alternate site	
Maakua Wells (DONALD Alternate)	1 operating and 1 standby well	5-4-5:1	State DLNR	151.66	Conservation	alternate site	
Kaluauui Well I	1 operating well	5-3-9:2	State DLNR	334.444	Agricultural	1.5 mgd	
Kaluauui Well II	1 operating well	5-3-9:2	State DLNR	334.444	Agricultural	1.5 mgd	
Kaluauui Well II (Alternate)	1 operating well	5-3-9:2	State DLNR	334.444	Agricultural	alternate site	
PUNALUU							
Punaluu Well IV	1 operating well	5-3-7:14	BWS	1.97	Agricultural	0.5 mgd	
Punaluu Well V	1 operating well	5-3-3:1	Bishop Estate	710.140	Agricultural	1.5 mgd	
Punaluu Wells V-A	1 operating and 1 standby well	5-3-7:23	Bishop Estate	145.222	Agricultural	1.5 mgd	
Punaluu Wells V-B	1 operating and 1 standby well	5-3-3:1	Bishop Estate	710.140	Agricultural	0.3 mgd	
Punaluu Wells V-C	1 operating and 1 standby well	5-3-11:1	Bishop Estate	2,947.52	Conservation	1.5 mgd	
Punaluu Wells V-D	1 operating and 1 standby well	5-3-11:1	Bishop Estate	2,947.52	Conservation	1.5 mgd	
Punaluu Tunnel or Inclined Wells	5,000' ± southwest tunnel or up to 4 inclined wells	5-3-11:1	Bishop Estate	2,947.52	Conservation	5 mgd or 2 mgd	
KAHANA							
Kahana Wells II	1 operating and 1 standby well	5-2-2:1	State DLNR	1,191.394	Conservation	0.5 mgd	
Kahana Wells III	up to 4 operating wells	5-2-1	State DLNR	3,881.938	Conservation	2.0 mgd	
Kahana Wells IV	up to 4 operating wells	5-2-1	State DLNR	3,881.938	Conservation	2.0 mgd	
Kahana Wells V	up to 4 operating wells	5-2-1	State DLNR	3,881.938	Conservation	2.0 mgd	
KAAWA							
Kaaawa Shaft	1 shaft	5-1-4:3	Kualoa Ranch Ltd.	0.71	Agricultural	0.3 mgd	
Kaaawa Wells I	1 operating and 1 standby well	5-1-4:1	Kualoa Ranch Ltd.	497.72	Agricultural	0.5 mgd	
Kaaawa Wells II	1 operating and 1 standby well	5-1-4:1	Kualoa Ranch Ltd.	497.72	Agricultural	0.5 mgd	

TABLE 4 (Continued)

REGION AND NAME OF WATER SOURCE	DESCRIPTION	TAX MAP KEY	PROPERTY OWNER	PARCEL SIZE (Acres)	STATE LAND USE DISTRICT	POTENTIAL YIELD	MAXIMUM
WAIKANE-WAIAHOLE							
Hakipuu Wells	1 operating and 1 standby well	4-9-2:1	Kualoa Ranch Ltd.	240.04	Agricultural	0.5 mgd	
Waikane Wells	1 operating and 1 standby well	4-8-6:1	Windward Partners	716.462	Agricultural	0.5 mgd	
Waikane Wells (Alternate)	1 operating and 1 standby well	4-8-6:1	Windward Partners	716.462	Agricultural	alternate site	
Uwau Wells	1 operating and 1 standby well	4-8-14:3	Waiahole Water Co. Ltd.	243.18	Conservation	0.5 mgd	
Waianu Wells	1 operating and 1 standby well	4-8-13:14	Waiahole Water Co. Ltd.	225.0	Conservation	0.5 mgd	
Waiahole Wells	1 operating and 1 standby well	4-8-13:1	State DLNR	828.73	Conservation	0.5 mgd	
Waiahole Wells (Alternate)	1 operating and 1 standby well	4-8-13:1	State DLNR	828.73	Conservation	alternate site	
WAIHEE -- KAHALUU							
Kaalaea Wells	1 operating and 1 standby well	4-7-7:9	Mary P. Schnack Trust	54.925	Urban	0.5 mgd	
Kaalaea Inclined Wells or Tunnel	up to 4 inclined wells or 2,000' ± west-southwest tunnel	4-7-8:1	Hiram L. Fong & Wife	507.69	Conservation	1 mgd or 2 mgd	
Kahaluu Wells I	1 operating and 1 standby well	4-7-8:2	BWS	1,146.512	Conservation	1.0 mgd	
Kahaluu Wells II-A	1 operating well	Unresolved	-----	-----	Urban	0.2 mgd	
Kahaluu Wells II-B	1 operating well	Unresolved	-----	-----	Urban	0.2 mgd	
Kahaluu Wells II-C	1 operating well	Unresolved	-----	-----	Urban	0.2 mgd	
Ahuimanu Inclined Wells or Tunnel	up to 4 inclined wells or 2,500' ± southwest tunnel	4-7-5:1	C&C of Honolulu	322.90	Conservation	1.5 mgd or 2 mgd	
KANEONE							
Iolekaa Well	1 operating well	4-6-27:11	BWS	1.767	Urban	0.3 mgd	
Haiku Well	1 operating well	4-6-15:1	BWS	498.842	Conservation	1.0 mgd	
Luluku Wells	1 operating and 1 standby well	4-5-41:4	Iolani School	421.225	Conservation	2.0 mgd	
Kuou Wells II	1 operating and 1 standby well	4-5-41:9	C&C of Honolulu	113.431	Conservation	2.0 mgd	
Kamooalii Wells I	1 operating and 1 standby well	4-5-42:1	Iolani School	359.324	Conservation	2.0 mgd	
Kamooalii Wells I (Alternate)	1 operating and 1 standby well	4-5-42:1	Iolani School	359.324	Conservation	2.0 mgd	
Kamooalii Wells II	1 operating and 1 standby well	4-5-35:1	C&C of Honolulu	215.881	Conservation	alternate site	
Kamooalii II (Alternate)	1 operating and 1 standby well	4-5-42:1	Iolani School	359.324	Conservation	2.0 mgd	
Halekou Wells	2 operating wells	H-3 R.O.W.	State DOT	-----	Conservation	alternate site	
Pali Highway Tunnel Drains	tunnels	4-2-10:3	State DOT	11.032	Conservation	0.7 mgd	
MAUNAWILI							
Maunawili Wells I	1 operating and 1 standby well	4-2-9:1	Castle Estate	323.0	Agricultural	0.5 mgd	
Maunawili Wells II	1 operating and 1 standby well	4-2-63:31	Robert C. Chung Estate	108,896 SF	Urban	0.5 mgd	
Maunawili Wells III (Alternate A)	1 operating and 1 standby well	4-2-63:32	BWS	21,000 SF	Urban	0.5 mgd	
Maunawili Wells III (Alternate B)	1 operating and 1 standby well	4-2-63:38	May E. Chung	351,152 SF	Urban	0.5 mgd	
WAIMANALO							
Waimanalo Well II	1 operating well	4-1-27:15	BWS	0.278	Agricultural	1.0 mgd	
Waimanalo Well III	1 operating well	Unresolved	-----	-----	Agricultural	0.5 mgd	
Waimanalo Well IV	1 operating well	4-1-26:23	University of Hawaii	59.325	Agricultural	0.5 mgd	

TABLE 6

PROPOSED WINDWARD OAHU WATER STORAGE FACILITIES IN BWS SIX-YEAR CAPITAL IMPROVEMENTS PROGRAM
(July 1, 1983 to June 30, 1989)

REGION AND NAME OF WATER STORAGE FACILITY	CAPACITY (Million Gallons)	SPILLWAY ELEVATION	HEIGHT	DIAMETER	TAX MAP KEY
HAUULA					
Hauula "180" Reservoir	0.5 MG	180'	20'	72'	5-4-4:4
KAHANA					
Kahana "315" Reservoir	6.0 MG	315'	32'	191'	5-2-1
KANEOTE					
Ahuimanu "500" Reservoir	0.5 MG	500'	20'	72'	4-7-5:2
Heeia Kai "272" Reservoir	1.5 MG	272'	22'	120'	4-6-14:5
Luluku "500" Reservoir	1.0 MG	500'	22'	96'	4-5-4:4
WAIMANALO					
Waimanalo "364" Reservoir No. 2	1.0 MG	364'	22'	96'	4-1-27:13

REGION AND NAME OF WATER STORAGE FACILITY	PROPERTY OWNER	PARCEL SIZE [ACRES]	STATE LAND USE DISTRICT	COUNTY ZONING
HAUULA				
Hauula "180" Reservoir	Plumbers Local 675	158.641	Conservation	P-1
KAHANA				
Kahana "315" Reservoir	State DLNR	3,881.938	Conservation	P-1
KANEOTE				
Ahuimanu "500" Reservoir	Valley of the Temples Corp.	298.683	Conservation	P-1
Heeia Kai "272" Reservoir	Bishop Estate	207.329	Conservation	P-1
Luluku "500" Reservoir	Iolani School	421.225	Conservation	P-1
WAIMANALO				
Waimanalo "364" Reservoir No. 2	State DLNR	49.0	Agricultural	AG-1

NOTE: Spillway elevation is the maximum elevation of water in a reservoir.

TABLE 7

PROPOSED WINDWARD OAHU WATER TRANSMISSION MAINS IN BWS SIX-YEAR CAPITAL IMPROVEMENT PROGRAM
(July 1, 1983 to June 30, 1989)

PIPELINE DIAMETER	PIPELINE LENGTH	FROM	TO	ON
12"	7,250'	Waii'ele Stream, Laie	Kawaipuna Street, Kaipapau	Kamehameha Highway
16"	9,300'	Kawaipuna Street, Kaipapau	Sacred Falls Trail, Kaluanui	Kamehameha Highway
20"	7,450'	Sacred Falls Trail, Kaluanui	Haleaha Road, Punaluu	Kamehameha Highway (a)
30"	65,000'	Haleaha Road, Punaluu	Waihee Road, Kahaluu	Kamehameha Highway (a)
42"	-----	Waihee Road, Kahaluu	Lulani Street, Kahaluu	Kamehameha & Kahekili Highways
42"	-----	Lulani Street, Kahaluu	Okana Road, Kahaluu	Ahuimanu Road
42"	-----	Okana Road, Kahaluu	Kulu'keoe Street, Kaneohe	Kahekili Highway
42"	-----	Kulu'keoe Street, Kaneohe	Anoi Road, Kaneohe	Keneke Street
42"	(24,840' TOTAL)	Anoi Road, Kaneohe	Kamehameha Highway, Kaneohe	Likelike Highway
30"	1,830'	Kehekili Highway, Heeia	Kahaluu Utility Tunnel	cross country
16"	7,900'	Heeia Street	Kolokio Street	Kamehameha Highway (b)
36"	8,800'	Old Kalaniana'ole Road, Kailua	Olomana Golf Course, Waimanalo	Kalaniana'ole Highway

Notes: (a) About 13,000' of the 65,000' are included as 20" pipeline in the Six-Year CIP.
(b) This project currently is not included in the Six-Year CIP.